

Master's Degree in Product Service System Design

# **TOUCH-PSSD**

Fostering the relationship between PSSD students and companies.

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# ABSTRACT

# English

Product Service System Design (PSSD), is a Master of Science that hosts international students and professors from all over the world. Connecting different cultures, knowledge and trends has been a great vision: PSSD has a unique value, that builds its students as unique talents. During the last 12 years more than 600 students have graduated: taking in consideration the experience of these previous students and the current trends, PSSD needs to evolve its flow and improve its offer. The poor knowledge of companies regarding the PSSD offer, the incapacity of students at explaining their potentiality and the frustrations that come with finding a job/internship, are the challenges addressed.

This thesis aims to investigate the path of the students during the two years' master program in order to provide them with stronger guidance and facilitate them during the job recruitment process. The research has been conducted taking in consideration the voices of the two main stakeholders: the students from one side, and the companies from the other side. The needs and the wishes of both of them are considered nec-

essary in order to provide a quality solution. From the research, the biggest pain point emerged; the lack of contact between the two actors during the academic years: as consequences, companies don't know the abilities of the students, and students struggle in finding a suitable job.

From this scenario, this thesis wants to find answers to the questions: "How might we put in touch the students with companies before working?", "How might we make companies aware of PSSD students?". The solution to these answers relies in the improvement and increase of the participation of companies during the academic years. By pushing the collaboration with students since the outset, both of the actors can benefit from one another: on one hand, companies have the chance to test the students and to measure their potential and talent and on the other hand, students can challenge themselves, understand their capabilities and face the difficulties of the job world.

What the thesis wants to deliver is a system that allows students to get in touch with companies

and to get awareness of the job panorama. The system consists in a collection of suggested activities given to or tailor made for the companies, that facilitate the contact with students during the classes, and create a bridge between these two actors; a space for students to find motivation and collaboration offers related with PSSD; an area related to the teachers to send direct collaboration requests to the companies.

In order to show how the system works, H-Farm (a company that already works with PSSD students and is interested in further collaborations with the Product Service System Design Master of Science) has been taken as an exemplification to prototype some of the activities. As a result, the journey presented will be adapted and made based on H-Farm's direction and with the path/collaborations that the company is willing to undertake with PSSD Master of Science.

# Italian

Product Service System Design (PSSD), è un corso di laurea specialistica della facoltà di Design del Politecnico di Milano, che accoglie studenti e professori internazionali, provenienti da tutto il mondo. Far interagire culture, conoscenze e trend differenti è stata un'intuizione promettente: PSSD ha un valore straordinario, che permette agli studenti di coltivare talenti ineguagliabili. Negli ultimi 12 anni si sono laureati più di 600 studenti: a partire dall'esperienza di questi ultimi e tenendo conto dello sviluppo di oggi, PSSD deve progredire e aumentare l'offerta proposta. Le sfide che deve affrontare sono soprattutto l'ignoranza delle aziende in termini di offerta da parte di PSSD, l'incapacità degli studenti di esporre le loro potenzialità e la frustrazione di coloro che non riescono a trovare un lavoro o uno stage coerente in questo settore.

Lo scopo di questa tesi è quello di analizzare più da vicino il percorso degli studenti durante i due anni di laurea specialistica al fine di indirizzarli verso un futuro migliore ed aiutarli durante il processo di ricerca di un lavoro. Per condurre la ricerca è stata data voce ad entrambe le parti interessate: gli studenti da una parte e le aziende dall'altra. I desideri e le necessità di entrambi sono fondamentali per trovare una soluzione di qualità. Dalla ricerca è emerso il problema principale: la mancanza di comunicazione tra le due parti durante gli anni accademici. Di conseguenza, le aziende non conoscono le vere potenzialità ed abilità degli studenti, e gli studenti hanno difficoltà a trovare un lavoro che gli si addica.

A partire da tale panorama, la tesi si pone come obiettivo quello di rispondere alle seguenti domande: "Come mettere in contatto gli studenti e le aziende prima del percorso lavorativo?", "Come far rendere conto alle aziende che ci sono studenti in PSSD?". La soluzione ha come base quella di migliorare ed aumentare la partecipazione delle aziende durante gli anni accademici. Se si installa questa collaborazione sin dall'inizio, entrambe le parti possono trarre beneficio l'una dall'altra. Le aziende, da un lato, avrebbero la possibilità di mettere alla prova gli studenti e di misurare il loro potenziale; gli studenti, dall'altro, avrebbero la possibilità di prendere coscienza delle proprie capacità e di affrontare le difficoltà del mondo del lavoro.

Ciò che la tesi si propone come obiettivo è di fornire un sistema che permetta agli studenti di entrare in contatto con le aziende e di acquisire consapevolezza del panorama lavorativo. Questo sistema suggerisce un insieme di attività fatte su misura per le aziende, che possano aiutare gli studenti durante le lezioni ed istituire un legame tra le due parti, dedica uno spazio agli studenti per far sì che trovino la giusta motivazione e delle offerte per collaborare con PSSD e riserva uno spazio ai professori perché possano inviare direttamente delle richieste di collaborazione alle aziende.

Al fine di dimostrare come funziona questo sistema, H-Farm (un'azienda che lavora già con studenti di PSSD ed è interessata ad una maggiore cooperazione con il corso di Product Service System Design) è stata usata come modello di creazione, ideazione ed invenzione di nuove attività. Di conseguenza, il percorso presentato sarà adattato e diretto da H-Farm e dalle collaborazioni che quest'ultima ha intenzione di intraprendere con PSSD.

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# \_PREMISE

Facing the master thesis is very hard. It requires a lot of self-empowerment and strength.

You have two different feelings: on one hand you want to put all yourself in the project, and on the other hand you just want to get rid of it.

The truth is that it is the last real project you can design following your passions, thinking about whatever you like and making it beautiful (not just aesthetically, but functionally). You can literally explore whichever topic, without constraints, and choose the one that make you more passionate, the one you like more. It is the opportunity of a lifetime: you will never be able again to spend so much time and effort on a personal project, getting also advices from qualified people that are truly interested in the topic. Finally, you have the opportunity to choose by yourself, to decide how to go on. It is the best.

Nevertheless, even though you are perfectly aware of this opportunity... what if you need some constraints? What if you are not really passionate about a topic? What if you just want to finish? What if you're focusing on other things of your

life and you can't really see why you should put so much effort just because you need to deliver e final project? What if you are not even ready to brainstorm alone, to take decisions and responsibilities that might change everything? What if you think that your brain is not enough and you need to find answers somewhere else? What if you are working and the thesis is not in your priorities? What if you miss the support of a team and think that what you're achieving will never be enough? What if... it doesn't go so well?

These two scenarios are far away one another. I personally fit in the second one. It has been very hard to really start working on the thesis: I disappointed myself in not having a passion or an interest strong enough to make me want to work on it, in postponing so much the moment to start.

The thesis happens in a moment of our lives that is full of question marks: who am I? What am I able to do? Where do I want to work? How does my future look like? What does the place I'm doing the internship offer me? Is it enough? Am

### Lenouah?

I questioned myself a lot about my capabilities, the way people see me, what I learnt and how I can make the world a better place: how can I keep living happy and satisfied, what does make me satisfied? I still can't find good answers. But what I found is an opportunity to go on, to move myself, to make a step forward: I was not the only one asking myself these questions. How many students at this point of their life feel like this? I have had the chance to have friends to share these thoughts and these fears with.

The main uncertainty is related with the professional future: what are we able to do, to offer? Where will we end up? What does attract us more? What does the job world expect from us? Which are the realities we will be able to work with? How can we know our value?

That's why this thesis started.

# **INTRODUCTION**

The topic of this thesis is the awareness around the Product Service System Design students and practices. The Master of Science held in Politecnico di Milano, attracts every year international students from all over the world, and produce qualified employees that are the most payed within Politecnico Design School students (Indagine Occupazionale, 2016).

Nevertheless, the knowledge about this course within companies, corporations and institutions is very low and it is difficult for them to position the students in the right place: however, their interest is raising and Politecnico who's pushed in the right direction the in the past, has to educate companies and promote its students.

The research of this thesis has been conducted following the "action-research" methodology, originated and validated by Kurt Lewin. Complying with this approach, the research has been done through the organization of the PSSD Advisory Board, the dispatch of an online survey to the alumni of PSSD (which collected more than 80 answers) and the analysis of reports

from both Politecnico offices and students. The scope of the research was mainly collecting information about the expectations and the lacks of PSSD offer from both companies and students: understanding the skills and topics a PSSD students expect to earn during the 2 years' master, and those companies expect him to have once graduated.

What emerged from the research is on one hand, that students are not able to explain their capabilities and that they don't have matured enough experiences in the real job world: they are missing the "touch" with companies; on the other hand, companies cannot offer a proper job to the students because they don't know enough about their competences.

Students are talented but they don't have enough experience within the job world, companies see their potential and are interested in investing in it, but their relationship needs to be strengthen. It is necessary that they meet in a safe environment where they both can test each other.

Increasing the collaboration between students and companies enables students to realize what are their strong points in relation with the brief, and companies to understand how students can be useful within their environment.

The questions raised at the end of the research have been: How might we get students in touch with companies before starting working?; Make companies aware of PSSD students?; Teach companies what PSSD means and does?

Touch-PSSD is an editorial and collaboration-supportive system that enables companies, institutions and corporations to understand what is Service Design, why PSSD is able to do Service Design, and how to collaborate with students. Through a series of articles linked by other sources, and a series of homemade contents about what happens in PSSD, companies have the chance to gather information about the trends and the activities that take place in PSSD. They also can select the way to collaborate with students, through a set of activities suggested, by choosing the one that better fit with them

or by assembling a customized one. Touch-PSSD follows them from the very first understanding of the topic, to the collaboration with students.

This service fosters the collaboration of students and companies, give visibility to students and allows them to have a clearer perception of the job opportunities panorama after graduation.

# RESEARCH

# RESEARCH FRAMEWORK

# Topics of the research.

The goal of the research has been understanding those pain points where the thesis has to focus in order to facilitate students' life after graduation. If students are so confused and ask themselves what is their role, where are they going to go, what is going to be their future... in a such blur reality, we need to make things as clear as possible

The topics have been different: what companies expect from students, what are the main skills

that students are required to have after graduating, what is the perception of PSSD in the job world, what are the activities that companies currently do with students within PSSD Master Course, how students feel during and after the internship, how students feel during classes and where are the pain points, what were the expectations of students before starting PSSD, what students think will happen to PSSD/Service Design in the next years.

# Sources

Since PSSD is a quite-new Master Class, the topic of this research appears new as well. Nevertheless, many are the points of view collected: this is because the audience that has been interviewed is very into the topic and really wants to help PSSD students in having a clearer future.

The research conducted can be divided in desk research and secondary research. The desk research consists in a collection of reports and

study cases investigated: the reports considered are both formal (the one given by RAP "RAP Report Analysis") and informal (the one called "OYAR"). The study cases consist in ways that companies collaborate with other universities (such as Bocconi), or how magazines and organizations were born in other universities. The secondary research is a way more consistent: information has been collected thanks to an event

with companies that has been organized within Politecnico and under the decision of the Head of the PSSD Master of Science, Anna Meroni, and the Professor and Fellow Researched in Design, Marzia Mortati. Also, the secondary research

got fed by an online survey that has been sent to PSSD graduated student, and to some interviews to current students about the current flow of PSSD Master Course and the opportunities of collaboration with companies.

# Method.

This thesis has been conducted following the methodology of the "action-research" originated and validated by Kurt Lewin, a German social psychologist. This methodology is defined as a "systemic inquiry that is collective, collaborative, self-reflective, critical and undertaken by participants in the inquiry" (McCutcheon e Jung, 1990).

"Three are the conditions to satisfy in order to deliver such an approach:

- The close relationship between knowledge acquisition and action; action research is 'research in action rather than research about action'. Action is taken to improve practice and the research generates new knowledge about how and why the improvements came about.
- Action research is conducted as a collaborative partnership between the researcher and a group in an organisation or community who participate in the process of the action research. Research proceeds as a cycle of joint planning, action, observation and reflection, where the reflection phase paves the way for further cycles of planning, acting, observing and reflecting in a spiral of learning, for example, label them 'constructing', 'planning action', 'taking action' and 'evaluating action'.
- The results are shared amongst participants and for action research in an academic context the output typically also includes a public report such as a dissertation or thesis.
- The output is 'actionable knowledge' that is useful to both the practitioner and academic communities." (Rose, Spinks, & Canhoto, 2015)

The research covers these requirements: the

research has been conducted directly with the companies and the students of PSSD through different means (events, survey, indirect interviews, talks); the research has been conducted thanks to the support of Politecnico staff (specifically: PSSD Advisory Board organizers and RAP) and PSSD alumni; the research result will be the topic of this thesis; the research is useful for the practitioner (since it will be the topic of the Master Course dissertation) and for the academic communities since it develops topics which are currently discussed within the CCS.

# **PSSD ADVISORY BOARD**

# Introduction.

The "PSSD Advisory Board" is an initiative of the Direction of the Master of Science program in Product Service System Design and of the Direction of the School of Design of Politecnico di Milano. Its aim is to provide non-binding strategic advice to the master programme, with particular regard to the interpretation of today designer skills and the identification of opportunities and expectations of the job context, in order to better define the profile of the graduate student and therefore of the training programme the master provides.

Therefore, PSSD Advisory Board on the one hand is aimed at supporting the teaching staff at Polimi to understand what companies, design agencies and other design related organisations are requiring from young graduates, and, on the other, thinking and promoting together with the School fresh opportunities for students, during their academic career (workshops, projects, internships, etc.) and afterwards (real job positions).

By creating a community of interest around the Master Degree, the PSSD Advisory Board aims to support overall a better training that is up-to-date, centred on the requests of the market but

also capable of proposing new visions for future design professionals.

Advisory Board Members

Currently, the PSSD Advisory Board counts more than 40 members, belonging to different companies, design agencies and organisations. Almost all of them have already experience in working with the School of Design at Polimi.

One of the main reasons for their collaboration with the Master program lays in the interest to find brilliant students and young professionals capable of bringing new ideas and approaches into their respective work environments. Additionally, the PSSD Master Direction deems that the Advisory Board could have a crucial role in exposing the young talents educated in PSSD to the experience of these companies in delivering products and services for real users in the real market, so to merge a more traditional way of learning in the classroom with a more experimental one based on field activities and project-based learning.

# 1st meeting.

On November 28th, the first meeting of the PSSD Advisory Board has been organized.

Participants have met at the Bovisa Campus of Politecnico di Milano to share objectives and insights on the intentions of the Advisory Board itself.

The schedule of the meeting was the following: an introduction about the reasons and goals of the project, an overview about Politecnico School of Design and the Master Degree in Product Service System Design, a focus on the course itself (what PSSD means, examples of what can be considered a PSS, values and approaches, academic offering).

In the presentation, particular attention was paid to the journey of students in the 2 years of Master, where the second year is partially flexible because of the choices of the students to study abroad: Erasmus Exchange, Double Degree Programs (Politong and PSSD&ME), internship. Further, statics on job placements have been shown and discussed: one year after graduation, 93% of PSSD students have a job. Of these, 82,1% are employed and 17,9% start their own business and are self-employed.

Within those who have been employed, 78,4% works outside Italy and the 67,7% works in small companies (1-49 employees), the 22,6% in medium companies (50-499), the 6,7% works in big companies (+500).

Employment Statistics, Career Service - Politecnico di Milano.

Charts from the latest Official First Employment

Survey of Politecnico di Milano, carried out yearly by the University Assessment Commission in collaboration with the Career Service and AlumniPolimi Association.

Among employees, again, the 39.5% found a job before graduating, the 32.7% within two months after graduation, the 11.6% within 6 months, and the 9.6% has taken more than 7 months to find a job.

Finally, a list of frequent job titles (checked on June 2016) found on LinkedIn looking at graduates' profiles has been shown. The most common are: Product manager, Project manager, Service designer, UX designer, Strategic designer, Product and Experience designer, Product and Brand designer, Interaction designer. These seem to be rather more related to the content and process flow (horizontal competences) rather than to the operational part (vertical competences).

These titles show what students tell about themselves.

What do companies say about PSSD graduates? This has been the focus of the first of two workshop activities, dealing with understanding the ideal profile of a PSSD student. The second has dealt with the possibility of establishing future collaborations (workshops, sponsorships, internships, etc.).

At the end of each activity participants have been asked to take part in a debate, in order to share thoughts and ask questions to the audience.

# Activity 1.

The activity, focused on the expectation of companies on students' knowledge and personal characteristics, was organised in two parts. The first part regards companies' previous experience with them:

Have the participants ever related with PSSD students? Have they ever worked with some of

them? And if so, what was the role of the students inside the company?

7 out of 36 participants say that they have never worked with PSSD students whereas the majority, 18, have already worked with them.

From the experience of the latter, the students were mainly in charge of UX design, Service

design, Interaction design, Research, Event planning, Design thinking education. Their roles in the organization were many and different. Some explanations coming from the participants are: "Service designer, Transdisciplinary design, building bridges between disciplines, combining experience, service, space, brand, product in one experience" Sigurdur Thorsteinsson, Design Group Italia;

"A professional that is able to understand the environment where he has to work, and by listening, researching, and using the right human resources he is able to move from an idea to a real project" Stefania Scolamiero, Abstract:

"Manage internal and external resources in order to design the forces that creates / shape the full customer experience" Stefano Carmi, Autogrill; someone that "is able to bring attention to needs of the people, with methods and ability to listen", Daniele Vitali, Spark Reply.

The roles attributed by companies to PSSD students are in general more related to the intangible value of the project, to the human understanding and to the coordination of a process. This is coherent to how the students describe their job positions in their curricula.

The second part of the first activity was aimed at collecting the preferences of participants in terms of competences and personal characteristics of graduates: what do companies expect from PSSD students? What kind of skills and attitude do they look for? What kinds of experiences are considered important?

As it turns out, the most interesting seems to be Technology, followed Social Sciences and Humanities. Nevertheless, the "New disciplines and cross disciplinary knowledge: Complexity Theory, Complex systems, Multidisciplinary approach, Transdisciplinary approach, Sustainability Science, Ergonomics, Information/ Communication Theory, Public Speaking" got the majority of votes, 27, with a

particular interest in multidisciplinary approach, transdisciplinary approach, public speaking and complex systems.

Other suggestions from the participants have been: content strategy, organization and management, data and algorithms, economics business and budgeting, coding and IT, behavioural modelling and change management, ethics. Concerning personal choices and interests as well as previous jobs and occupations, the most various preferences have been collected.

All kinds of job experiences are appreciated, as long as "they were exposed to the complexity of organizations", as Fabio Di Liberto, from Isko, remarks. These experiences do not necessarily have to concern the design field: freelancing, startup, volunteering in a NGO or in a non-profit organization, social impact activities, sale assistant, customer service and customer care clerk. It appeared that empathy and ability to understand clients is essential: indeed, Fabrizio Pierandrei, from Paco Design Collaborative, says "Any experience in which they deal with people (not stupidly staying in an office)".

Another valuable trait is showing a strong passion that defines better who the candidate is: "Being passionate of something beyond the job!" as Chiara Torti, from Spark Reply, says.

Teamwork is considered fundamental: as Ilaria Morganti, Mare Culturale Urbano says "whichever kind of experience that made the candidate able to manage a job relation, relate with a team" and deal with other peers, in order to achieve results. Teamwork can be applied to many circumstances: from university projects, to jams and workshops, from theatre school (that is related also with the expertise in storytelling and speech), to sports. Experiences abroad emerged as well: whereas related with travels, job or studies, travelling appears as an important feature. Further, participants are very interested in the fields of data (big data, data science, data analysis, IT) and business (marketing, economics, trends analysis). Previous experiences in project management and deeper technical knowledge is, clearly, a reason of distinction.

Participants have also been asked to indicate the most interesting soft skills and hard skills a PSSD graduate should have. Between the soft skills, the most recurring ones have been: story-telling, problem solving, improvisation, flexibility, team building, open minded attitude, curiosity, leadership, creativity, multidisciplinarity, empathy, strategic thinking, analytical skills, visualization of complex systems.

Concerning hard skills, the most valuable seemed



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to be: economics and micro economics, business modelling, social media management, visual storytelling. interaction design, UX, CX, design thinking methodology, 3D modelling, Microsoft, languages, anthropology, social science,

data science /management, IT competences, KPI metrics

The final part of the exercise requested participants to rank the chosen topics (of the Realm of Interests and Passions they would have liked the candidate to have), and therefore "research passionate" gained the first position with 26 votes, "international mobility" was second with 16 votes, and "technology geek" was last with 14 votes.

Concerning students' personal attitude, the most interesting seemed to be "experimental mind-set" and "social intelligence", followed by "emotional intelligence", and "creativity", whereas the less interesting is "theoretical mind-set", eighth position.

These two very different results might seem contradictory. If on the one hand, the most requested approach is "research passionate", on the other hand the less interesting personal feature is "theoretical mind-set". What does this mean? Taking into consideration what participants have said is very relevant here.

Stefano Carmi, from Autogrill, expressed his point of view about the ability of the PSSD program in giving a specific mind-set to students, that allows them to "look at things and analyse the phenomena" in an interesting way.

Alessandro Masserdotti, from DOT DOT DOT, says that PSSD designers should "learn a little bit of everything"

Raffaele Boiano, from Fifth Beat, remarks how PSSD designers have difficulties in considering themselves experts in a specific subject. Nevertheless, this is not a flaw: indeed, they have the characteristics of being the "glue" of a project team, the person that makes everyone communicate and collaborate, "they need to be the facilitators".

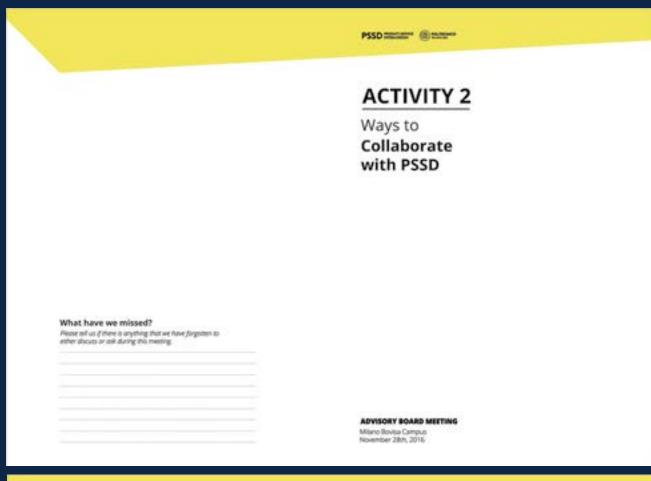
"Research Passionate" + "Social intelligence" + "Experimental mind-set" are the key features of the PSS designer: "Research passionate" indicates someone that is curious about the workings of the world and uses different tools to find out: "Social intelligence" refers to the ability in under-

standing people's needs, not just as single identities but as communities; "Experimental mind-set" is related to the approach to work, and indicates the importance of prototyping and testing draft ideas directly with users.

During the debate, other interesting lacks and best practices of the PSSD graduates emerged. One of the most important is that "PSSD students cannot explain what they are able to do. what is their job. Neither the majority of companies knows this professional figure; indeed, PSSD students are usually used to train the HR departments!" says Fabio Di Liberto, adjunct professor in Politecnico and Brand Director of Isko. Stefano Carmi, Autogrill, adds that "Companies still don't understand what a Service Designer is, so they don't know if they need it or not". Raising awareness of their capabilities has to be one of the objectives. On one hand, if they don't know who they are, they cannot promote themselves correctly; on the other hand, if companies have never heard about this role, they can't imagine the potential benefits that they could acquire. It is very important to work in both directions.

Another pain point concerns the relationship between PSSD students and other workers in the team. If, as mentioned above, PSS designers are "the glue of the team", and "they need to know a little bit of everything", it is important that PSSD students "cross with other students from different disciplines", as Matteo Vignoli, from University of Modena and Reggio Emilia, suggests. Making PSSD students working with other people with different backgrounds, (and this means different mind-sets), would make them more flexible and would train them for the real world, where they will have to face the complexity of dealing with a team of people that don't speak the same language.

Finally, the topics of aesthetic and visualization have been faced. "Aesthetics in the digital world needs the same feeling as in the tangible world" says Klaus-Peter Roehler, regional CEO of Allianz: "Creativity is important, communication aesthetic is very important" says Stefano Carmi, Autogrill. In a world that is switching from product to services, the visualization of the intangible experience is essential to comprehend the value proposition. So, beside the fact that things have to work beau-





tifully, they also need to look beautiful: this dimension has not to be forgotten, because a pleasant visualization helps with a more efficient delivery. Matteo Vignoli, from the University of Modena and Reggio Emilia and from Epoca, had more than 35 students as interns. From his experience, he underlined that one of the best achievements had been to make PSSD students work with business and technology experts: the mix of those three backgrounds generated great results.

Mark Vanderbeeken, from Experientia, has been working as well with several PSSD students: he says that "Product service system designers have to be considered as a strategic tool to give a new shape to companies".

Finally, Jonathan Edelman, adjunct professor in Politecnico di Milano, believes that "the trajectory of these scholars does not make them simple employees but good leaders".

# Activity 2.

The second activity has looked into understanding the possibilities for Advisory Board members to be more involved with PSSD in the future. This has received 28 out of 31 positive answers, 3 blank answers and 0 negative. The most interesting channels for collaboration seems to be connected to the offer of internship positions, with 21 participants interested, followed by project based collaborations with 16 votes, and thesis with 13 votes. Other suggestions coming from participants have included in company training programs, presentation of professional projects, mixed student and professional lecture series. observatory for potential clients, field research, stakeholder engagement, students as a special unit inside other companies.

Concerning the topics that Advisory Board Members are interested in developing with PSSD, many options have appeared. The most frequent ones are: services for social inclusion, workshops aimed at mapping customer journeys, food innovation programs, in-store tourism, urban planning, service design and architecture, behavioural modelling, service optimisation, global innovation, policy design, cross disciplinary studies, community services, digital and retail, smart cities, UX, data driven design, brand strategy, and "methodological approach to understand people's behaviours" suggested by Mark Vanderbeeken, from Experientia.

Further suggestions can be considered starting points for raising awareness about PSSD and connected disciplinary approaches in companies, for example the idea of using design thinking in companies, integrating business and technology in design practice, etc. "The majority of the projects dies inside the company itself. We need to integrate the traditional mindset of companies with the customer centric approach of the students" says Enrico Girotti, from Digital Accademia, H-Farm.

Some clues have been given: educating HR to understand the value of PSSD (suggested by Fabio Di Liberto and Jonathan Edelman); defining clear competences of PSSD graduates; "Integrating later thinking methods (being aware of contemporaneity: politics, economics, environmental issues)", as suggested by Sergio Galasso, from Mare Culturale Urbano.

# Conclusions.

The meeting has been a very important starting point for future improvements in the educational program. On one hand, it has helped to shape the traits of the ideal PSS designer, to understand what the Master Class in PSSD is missing and where the academic offering should focus more, in order to improve its quality. On the other hand, it is evident that there is a very good ground for possible and future collaborations with many different types of companies, although much still needs to be done to raise awareness – in companies directly – of what PSSD means and does inside a team.

The future goal of the PSSD Direction and of the Advisory Board will be centred on understanding the best actions to answer these challenges.

# **ONLINE SURVEY**

# Introduction.

An online survey has been sent to the ex-PSSD students, in order to investigate the actual trends concerning their job positions and their feelings about what PSSD meant for them.

The kind of questions asked intended on one hand to understand what they are doing in the companies they are working for, by making a parallelism with the questions asked during the PSSD Advisory Board, and on the other hand to figure what PSSD taught and missed in teaching them

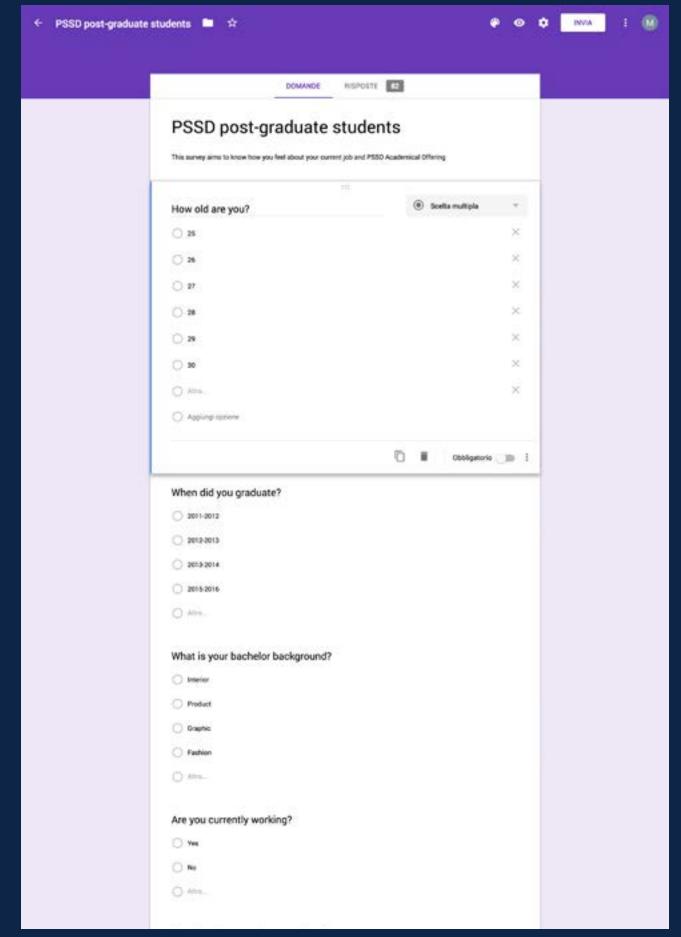
The people who answered have been contacted personally, or in groups: it has to be thanked Carolina Cruz for her kind help in sending the survey to the mailing list of Politecnico, as well as other ex-students, such as Francesca Carella, that helped the survey be filled by sharing the link in social network groups.

On February the 8th the survey has been sent: until February 14th,76 answers have been collected. This number is a great achievement, since the students that have been contacted are around 650. It means that more than 1 stu-

dent over 10 answered. Again, this number shows the great interest in ex PSSD students about the topic, and their willingness to give their point of view.

The following information are referred to those 76: the survey keeps receiving answers, but in order to be able to make an analysis, these first 76 respondents are considered a good sample. options have appeared. The most frequent ones are: services for social inclusion, workshops aimed at mapping customer journeys, food innovation programs, in-store tourism, urban planning, service design and architecture, behavioural modelling, service optimisation, global innovation, policy design, cross disciplinary studies, community services, digital and retail, smart cities, UX, data driven design, brand strategy, and "methodological approach to understand people's behaviours" suggested by Mark Vanderbeeken, from Experientia.

Further suggestions can be considered starting points for raising awareness about PSSD and connected disciplinary approaches in companies, for example the idea of using design think



PSSD Online Survey pt\_1 25

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How did you	find this job?	
_ Social network		
Word of mouth		
Made my own t	business	
Career Service		
☐ Volunteer appli	cation	
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At director		
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Team building		

# Generic questions.

The survey has been sent to post-graduate students: the sample taken in consideration goes from 25+ years old students, graduated maximum the April session of 2016.

The 4% of ex-students that answered is now 25 years old, 21.3% is 26 years old, 12% is 27 years old, 16% is 28 years old, 10.7% is 29 years old, the 18.7% are 30 years old, and 17.3% are more than 30 years old.

17.3% graduated in 2011-2012, 17.3% graduated in 2012-2013, 28% graduated in 2013-2014, 25.3% graduated in 2015-2016.

The majority of people had their bachelor in Product Design, which is 49.3% percentage. Less frequent are the rest of the design faculties: 17.3% comes from Interior Design schools, 16% from Graphic Design, and 3% from Fashion Design. There are few outsiders: one from physics, one from engineering and one from architecture.

The highest samples are people of 26 years old, graduated in 2013-2014, with a previous bachelor background in product design.

# Questions related with their actual job.

95.9% of respondents are currently working. Of those working, 27% is working since less than one year, 23% has been working since between 1 and 2 years, 34% since between 2 and 4 years, and 16% since more than 4 years.

The most frequent way of finding a job it appears to be word of mouth, 34.6% of votes. 18.7% of respondents founded their job thanks to social networks, 9.3% thanks to career service, and 6.7% by sending a volunteer application. 24% of respondents started their own business, and 28% founded their actual job either way. Of those last ones, two answers stands out: one is about the Alta Scuola Politecnico, because two people mentioned that they have been involved in some projects with it; the other one is about a recruitment website that is http://it.fashionjobs.com/.

48% of respondents affirms to be currently working in Service Design. 36.8% works in the UX Design field, 23.7% works in Graphic Design, 18.4% works in Interaction Design, 14.5% works in Product Design, 11.8% works as Art Director, and 6.6% works in Interior Design. 31.6% works in other fields. Of those lasting ones, some options given by the respondents are similar: they work in strategic design, or events management, visual merchandising, or in the research and academic field.

58.1% of the respondents are contracted with a full-time job, 23% are freelancers, 13.5% have an open ended contract, whereas 5.4% have a part-time contract; 12.2% have a project base contract, and 5.4% have an internship contract.

The most relevant skills they are asked to have in their jobs, are Problem Solving with 80% of people voting. Strategic Thinking with 74% of votes. Multidisciplinary approach with 65.3%, Flexibility with 60%, Design thinking methodology with 54.3%, and UX with 54%.

Only 8.2% of ex-students didn't work before this current job.

Research is the most relevant interests among the participants, voted by 56% of them. International mobility got the second place with 54.7% of votes, and Technology got instead 45.3%.

The three personal characteristics that have been voted most are Creativity by 67.1% of people. Experimental mind-set by 50% of people, and Emotional intelligence by 48.7% of people.

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# Questions related with PSSD.

# What did you expect from PSSD?

stands out.

Some students didn't have a clear idea about PSSD. To the question "What did you expect from PSSD" some the answers are: "That it would find me a job and that it would actually teach me everything I needed to go look for one" like Ludovica Vando, "I didn't know what to expect because I didn't get anything at the moment of the application...I was attracted by the multicultural aspect and by something else I can't explain" like Francesca Carella writes.

From this last answer, and many of the followings, the topic of International flavour

Among those that had a perception of PSSD, one of the most current expectations is related to the strategic thinking: "Understanding real approach to strategic design", like Vahid Daem Inanloo thought; "I expected an international-oriented education in Design with a strategical perspective", like Martina Rossi says; "International experiences & strategic approach" like Simone Miraldi.

The topic of Service Design has been emerged as well: "Learning how to design a service" from Chiara Minotti, "To be able to manage service complexity" like Chiara Leonardi thought, "Designing services around products" said Arianna Biamonti.

From the past quote, it is evident the immediate link that students make with Product Design: "To move beyond product-focused design" has been another answer received by Judit Borosan, or "To escape from product design" which has been collected from an anonymous respondent.

If on one hand ex-students expected to know more from the Service Design world, on the other hand they expected as well learning how to use the right Methodology to create it: "To learn and apply service design approaches" like Jenni Parker says, or just "Tools" like Juan Mendez affirms.

Speaking about "approach", ex-students foresaw a "Multidisciplinary approach" like Andrea Maldifassi writes, and "a more avant-garde and experimental studies / projects" like Ranny Monita suggests: this is probably due because of the allowed mixed background of bachelor required to access.

Other topic emerged singularly from the respondents are: "more projects in collaboration with companies and application in the real world" and "start-up creation, more multidisciplinary team", both from anonymous sources.

# What did PSSD miss in teaching you?

The most frequent lack mentioned by the ex-students is the missing connection with companies and real clients: "More tools and real context projects" writes Juan Mendez; "Connection with real world projects", "More concrete hands-on experience (e.g. research with real users)", say anonymous respon-

dents. "I would rather have had more focus on Service and Strategy in real contextualized projects, mapping and designing more complex rather than creative and theoretical projects. The portfolio in the end looked too conceptual, lacking some grounding in commercial projects, like redesigning a

What kind of hard and soft skills are you more usually asked to have in your job?	
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Improvisation	
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Leadership	
Multideciplinary approach	
☐ Empathy	
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Analytical skills	
Visualization of complex systems	
☐ Económics	
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Social media management	
☐ Visual storytelling	
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☐ Social science	
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○ No	
Which kind of job did you have before?	
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What does interest you more?	
☐ International mobility	
☐ Technology	
☐ Research	
Select the characteristics that are closer to your attitude (max 3)	
☐ Creativity	
Social intelligence	
Emotional intelligence	
Negotiation	
Leadership	
☐ Theoretical mindset	
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☐ Risktaking mindset	
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Do people in your job know what PSSD is?	
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supermarket costumer journey, for example. I didn't like that the semesters were divided into product, space and service. I wish all projects were about designing business that would require thinking of all of them at the same time" Writes Carla Lemgruber. "Execution of PSS in real market" writes Vahid Daem Inanloo. "Priorities in the real world. be in touch with reality (sometimes they left us "on a cloud" with projects that are not useful in the real world", "More strategy and design thinking for a business goal. PSSD should be more connected with business reality", "How to work in a real environment and not only with peer to peer initiatives". "How to manage clients, do user testing of the solutions, apply Agile methodologies", say anonymous sources.

Another relevant missing point is the one concerning marketing and business. The testimonies collected are: "Business & Marketing attitude and knowhow" says Salvatore Difrancesco; "Business part of service design (implementation, monitoring, KPIs)" writes Judit Boros. "Business, economy and marketing", "The business point of view. Most of the project were like startup while in a consultancy we work with companies with a set of already existing problems and challenges", "Great in teaching social and community service projects, it misses business service cases, which are the most required by real service design companies", "Practical application in the business world", "Thinking about a concrete business model, creating ideas that actually works in real life and not only the process to create services", from an anony-

### mous sources.

What's more, the importance of some subjects that are relevant later in the work field such as UX and UI: "More design doing. Lots of great lectures but few project in important disciplines like UX or UI" Anonymous "UX and ID (the real world after the service design)" writes Elisa Berzuini, and "Interaction Design / web design" adds Chiara Minotti. "Everything regarding UX, UI, programming and the tools/programs needed" remarks Ludovica Vando.

Other missing teachings are "User research!" suggested by an anonymous respondent. "A complete understanding of the general path of the course. I didn't find any logic consequence of the courses" writes Martina Rossi. "Proper documentation of a project" writes Bruno Santos. "Team management, organizational skills" and "Future-casting and application of theory" written both by anonymous respondents. An interesting point of view is: "A strong connection to companies that are really able to offer a job, not just connection to those who are "personally" connected and just want to take advantage of students by paying them nothing and pretending them to work overtime. Especially, design firms should simple review the profiles, and so candidates would be selected by firms as standard procedure regulated by Poli, not the other way around" specifies Tommaso Martucci.

Finally, Simone Miraldi says "PSSD is too short and it can't go deep enough in several fields such as business design".

# Do people in your job know what PSSD is?

50.7% of the respondents answered No, 21.3% answered Maybe, 16% Yes, and 12% Other.

Among the written answers received, some emerged: "PSSD is a good definition for an

academic course, students are wrong when they write PSS Designer because it simply doesn't exist in the professional world. My idea of structuring the second year in a more focused way, would allow students

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to focus more on one aspect of the broad range coming from PSSD, and so get from there an official title" suggests Tommaso Martucci. Elisa Berzuini agrees and writes "PSSD is a too complicated name for a university course when recruiters read that in the CV is not clear to them. Keep it simple and effective".

# What is the perception of PSSD in the job world?

The perception of PSSD is confused, not only for the companies: "Sometimes it is hard to understand exactly what we can be able to do" by an anonymous source.

Companies are divided between those that don't have any idea: "Service Design, meaning service as a one of the touch-point" from the experience of Ranny Monita. "It's not very known, it's perceived as a new thing", "It is very unclear; many professionals in product, interior design and architecture don't know what PSSD is and are dubious about our master program. I think university should try to communicate more about PSSD", "Unfortunately, it is not understood by many people. The global idea is that where are crazy people doing workshop and solving problems with post-it. About PSSD in Politecnico is judged a very good master by people knowing service design world" from anonymous sources.

Those that don't know about it and wouldn't be interested "Would not work, companies in my country care about money without responsibility, so PSS is not good for them" like Vahid daem inanloo wrote. "Some people don't even know it exists, low budget companies don't see the point of investing into it. The ones that are really open minded are very excited about it. Designers without PSSD studies are joining the trend, but not all of them understand the process very well and they confuse people" from an anonymous respondent.

Those that confuse PSSD with Service Design: "The knowledge regarding Service Design is very limited. Nobody knows what it is, so PSSD becomes even more complex" Carla Lemgruber: "Here in London it is not known. Service design however is very popular and in demand" from Jenni Parker: "Most of the people don't know what is it, but they heard of service design and are attracted by it. So, as soon as you explain to them what you do, they are immediately attracted" Martina Rossi: "Now the role of service designer is getting "famous" so I think is seen as something new and attractive, really useful in putting the user at the centre" from an anonymous source.

Those that confuse it with UX, UI or Graphic Design: "In France, service design is not fully understood. It is all about UX and UI" wrote Arianna Biamonti; "I should know so I don't ask what it is, but I confuse it with Graphic / UX / good presentation / smart thinking / post its" like Chiara Leonardi says; "A nuance of communication design most of the time. Pssd is more!!", "Perfect for whom want to work in UX field" from anonymous respondents.

Those that are not very sue about what it is by they are attracted and see a potentiality: "Sounds serious, but they cannot really understand what is it exactly good for, related to their business or needs" Judit Boros; "A former boss defined me as a "jack of all trades". I could adapt to anything: UX, product design, business strategy, service" like Simone Miraldi writes. "Super but just in technological field or company with a strong relationship with abroad countries". "A strange place where people are trained to become extremely flexible. The negative part is that this flexibility brings a PSSD student

Creativity	
Social intelligence	
Enotional intelligence	
Negotiation	
Leadership	
☐ Theoretical mindset	
Experimental mindset	
☐ Risk taking mindset	
☐ World oriented attitude	
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What did you expect from PSSD?	
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What did PSSD teach you?	
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leave me your name here. Thanks!	

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to be skilled in moderating working groups, so sometimes students are confused with

coaches for companies" from anonymous sources

# How do you think the role of the PSS Designers will change in the future?

The main topic emerged is about Strategic Design: "I think if we promote them (PSS Designers) more in companies they could really lead to successful strategic innovation both for society and environment and also could help companies sustain their businesses in a humanistic way" writes Vahid Daem Inanloo; "I think it will be more and more obvious that for today's business needs, you want that type of designer in your team as well" suggest Judit Boros; "As thinkers, it will evolve more and more towards strategic design" thinks Arianna Biamonti; "It is evolving to become a blend of strategic designer and change manager" says Jenni Parker: "Orchestrate & facilitate communication among company depts. & drive cultural change, for services implementation" believes Chiara Leonardi. This topic is connected as well to the one of Consultancy: "I think PSS would be more a consultant than a designer, or someone that will own his own (successful) business" thinks an anonymous respondent; "Service design will be the new consultancy" affirms Luca

Another important topic is related Technology: "It will become more focused on digital tools and strategies", "PSS designers needs to understand better the it and technological word, there is where all projects are going" think anonymous respondents. "Services will be 100% online, and we'll have to understand how the web and automation really works to design better self-served products and services like SAAS (software as a service)" like Bruno Santos says. "I think it's demand is increasing more and more, and the focus on digital platforms and projects that integrate physical and digital journeys is increasing

Gaverina.

drastically every year. For that reason, giving more attention to UX projects can be very useful for future students" suggests Carla Lembgruber.

Innovation arose as well: "PSS Designer will everyday more involved in: process design / organisational design. PSS Designer will leave the design consultancy offices to go straight into the "innovation area" of every kind of enterprise that are finally understanding the importance of design" writes an anonymous respondent; "We're a hybrid of various disciplines, so we can adapt to solve any problem in every context. PSS designers can bring together various worlds to innovate and create value. Companies are still closed to their very comfortable and well-known business models" thinks Juan Mendez.

An interesting point of view, concerning Government, comes from Elisa Berzuini who wrote: "Innovating the governments and how they run countries". Other respondents suggest a deep change: "I think traditional roles such as product design will disappear, PSS will be more active but service oriented: products will enter the scene only necessary as a part of more complex systems" from an anonymous source; "Hard question. Probably now service design is at the highest peak of its glory. Everyone is talking about it as it was a trend. I think that somehow this will finish, I think that another process/methodology will arise and will be called in another way, but what service designers are doing will slightly change, not disruptively" writes Martina Rossi.

# Conclusions.

The online survey sent has been a great success. Many ex-students answered the survey, some of them showed personal interest in the topic and left their contact to be updated or take part in the project. The majority of them gave very interesting and truthful answers: it is possible to realize their involvement by the way they wrote and the quantity of personal points of view they explained.

The sample of the respondent is an ex-student, 26 years old, graduated in the academical year of 2013-2014, who is currently working in Service Design field, with a full-time contract, and who's found his job through word of mouth. In his/her job the most requested soft skills he/she needs to have are: problem solving, strategical thinking and multidisciplinary approach. He/She is interested in the research field, and the three characteristics that can reflect him/her most are creativity, experimental mind-set, emotional intelligence.

When he/she applied to PSSD, he/she didn't have a clear idea of what would have happened: he/she thought that it might have learnt something about strategical thinking, service design, methodology: that he/she would have had the chance to collaborate with companies and to get to know many people from different countries and from different academical backgrounds, that would have helped him/her in developing his/her skills in languages and multidisciplinary approach.

At the end of the two years he/she was quite satisfied: he/she got almost everything he/she thought. He/she learnt as well the user centered philosophy and how to be leader of a team. What he/she was missing from his/her expectations was the contact with companies, and the realization of something real that could work in the market, like start-ups. He/she would have liked as well to receive notions of marketing and business (which are very important inside companies), UX and UI (which are now very required from the

industry); he/she would have liked to know a little bit more how to structure the process of a project on his/her own, and how to document it. Finally, he/she founded difficult to find a job after graduation: he/she would have liked Politecnico to help her finding the right companies.

Concerning companies, these last ones do not really know what PSSD means: either they confuse it with Service Design or with UX - UI, either they really don't have any idea of the topic or if they do have a little one, they are attracted but confused. He/she knows she can work for both UX-UI Design and Service Design as well: he/she asks him/herself why PSSD still has this connotation, that just complicates things and doesn't allow him/her to be more competitive in the job recruitment moment. In this landscape, where very few knows really what PSSD is about, it is difficult to find a place to work, where the company can offer the students a good support and training

But expectations and hopes are not low. Indeed, he/she thinks the demand of PSS designers will increase in the next future, and their role will concern Strategic Design, or Innovation within companies: it can also be related with Government issues, and for sure it will be connected with technological trends.

It has to be remarked that many of the students who answered the survey didn't make any difference from PSSD while mentioning Service Design. Indeed, to the question "How do you think the role of the PSS Designers will change in the future?" some of the answers are: "Service design will be the new consultancy" from Luca Gaverina; "Services will be 100% online, and we'll have to understand how the web (...)" from Bruno Santos: to the question "What is the perception of PSSD in the job world?" one of the answers was: "Now the role of service designer is getting "famous" from an anonymous source.

Others, instead, remarks the difference: to the question "What is the perception of PSSD in the

job world?" some of the answers are: "The knowledge regarding Service Design is very limited. Nobody knows what it is, so PSSD becomes even more complex" Carla Lemgruber: "Here in London it is not known. Service design however is very popular and in demand" from Jenni Parker.

Also the connection with UX and UI has been remarked. On one side some of the ex-students think that the companies confuse PSSD with UX and UI "The figure of service designer is so rare that it almost doesn't exist and companies think it means doing UX-UIi" like Ludovica Vando says. On the other side they think there is a lack in knowledge of UX – UI during PSSD: to the question "What PSSD missed in teaching you" one of the answers was "UX and ID (the real world after the service design)" from Elisa Berzuini.

Tommaso Martucci suggests: "Generally, PSSD is good to get an idea of the whole picture by touching different design fields, but the second year should be way more focused, so students should be able to select more precisely if they want to follow UX/UI or Service or Research, etc... So it would be easier to find a job after that. Usually the projects in student's portfolio are way too "abstract" To the question "What is the perception of PSSD in the job world?" he answers: "Main point: when I started to send my CV around, the first question was always "What is PSSD?" And then I took the freedom to change the title of my MoS just because was annoying to get that guestion during every interview. PSSD is unknown, obviously. I've been living and working in UK, China, Germany and so on... talking to people from all around the world, and so PSSD is "just" a course, but Politecnico of Milano -instead- is a big name. People knows about Harvard or Parsons or Central Saint Martins but not about their courses".

# RAP REPORT ANALYSIS

# Introduction.

Thanks to the collaboration with RAP offices, the coordinator of all the internships of the School of Design, it has been analyzed the report containing numbers and statistics of the internships taken in 2015. The research from RAP takes in consideration the whole Department of the School of Design: in this thesis, just few data will be used, that is to say those regarding specifically the Master of Science in Product Service System Design.

This document is very helpful to visualize the big

picture of the way students approach their first job in the field of PSSD. The report analyses many aspects of the internship, from the point of view of both students and companies. It is divided in 3 parts. The first part, "Internships and stages 2015", concerns generic questions about the location of the company, further collaboration and payment. The second part contains "Student evaluation form" (focus on page 24). The third part is about "Company tutors' forms" (focus on page 36,37).

# Internships and stages 2015.

The first part of the research concerns generic information: where did the student had their internship? How many of them developed the thesis within the company during the internship? How many of them received a collaboration offer after the internship? Which kind of offer? How many students got payed during their internship? This kind of generic question are useful to under-

stand how PSSD is related with companies in Italy and abroad, how much students and companies are interested in developing a relationship together, and if companies are willing to pay PSSD students for their support or not.

In 2015, PSSD counts 76 students. 43 of them started their internship in Italy, whereas 33 of them

went abroad (page 4). It is interesting to notice, considering the rest of the Design Courses, how small is the difference between the two groups: indeed, first of all students from PSSD are 50% Italian and 50% foreigners, and, numbers can tell, they are usually more likely to make experiences abroad. This characteristic is a requisite to enter the Master, and during the years spent in the classes, the students are always suggested to build team where the participants belong to different cultures.

5 out of 76 students of PSSD developed the thesis inside the company where they were doing the internship (page 7).

21 out of 76 students received a collaboration

offer (page 8) at the end of the internship. Within those, 7 were offered a project collaboration contract, 2 an open-ended contract, 1 of them was contracted as apprenticeship, 3 of the offers concerned another internship, and 9 were related to other kinds of collaboration (page 9, 10, 11).

41 students of PSSD filled the information about the retribution (page 12). 5 of them received an internship check, 11 received expenses reimbursement, 2 received meal allowance, 6 of them received other kind of payment, and finally 17 of them didn't receive any kind of payment. 24 students out of 41 received an amount of money for the job done. More than the half of them.

"Company tutors' forms" (focus on page 36,37).

# Students' evaluation form.

The second part of the research is about the evaluation of the internship from the student's point of view (page 24). 40 students have been questioned.

34 students agreed that the company they worked for respected the educational plan offered, 5 think that they respected enough and 1 think that they respected the plan barely: 30 believe to have reached the goal set, 8 enough, 1 barely and 1 at all. 32 students had a supportive tutor within the company, 6 enough and 2 barely. 27 students think that the training offered in the company was appropriate, 11 believe it was enough appropriate and 2 believe it was barely appropriate. 36 students believe that the experience was useful to enter the job field. 3 believe it was useful enough and 1 think it was not useful at all. Overall the internships of these students have been jugged positive by 34 of them, enough positive by 5, and negative by 1.

The first question concerned the relevant aspects that lead the students choosing the internship (page 24).

The first factor, with 23 votes is "interesting offer", the second one with 21 votes is "interesting company", the third one "working environment" with 18 votes, and "further collaborations" with 16 votes. Within the lowest factors required there is "coherence with studies" with 13 votes: this data is actu-

ally a very interesting information if we consider that 10 students agreed in saying that the coherence was not at all an important requirement for them: indeed, for the nature itself of PSSD, that collects students with different bachelor background to give them another kind of education and training, the graduates are able to work as much in the design agencies as much in corporate companies. "Thesis development" that got just 4 votes, and "close to your house" that got 4 votes as well.

The second and last question was related to the skills that they had in advance or they developed during the internship has been asked (page 25). Within those students affirm to have had before starting the internship, the most voted are: teamwork collaboration with 35 votes, deadline and delivery time with 27 votes, autonomy in research and informatics software both with 24 votes, organization of own job with 23 votes. Within those that have been developed inside the company, the most common are: market and competitors' dynamic with 33 votes, project complexity and client management both with 30 votes, strategic contribution with 25 votes and technical aspects with 23 votes, whereas within those characteristics that still are missing, the most voted is economic impacts and budgeting with 12 votes.

Statistiche RAP 2015



2015

Ufficio Rap Scuola Del Design Politecnico di Milano

Antonietta Leanza

40 Rap Report "Statistiche Tirocini e Stage"

# Statistiche Tirocini e Stage

Pag. 1

# Companies tutors' evaluation form.

The third part of the research analyses the evaluation of the students from the point of view of the companies (page 36, 37).

Concerning the soft skills (page 36), results are positive: 30 votes for the excellent motivation and interest shown by the interns, 28 votes for the professional potentiality, 27 votes both for the capability of working in team and for responsibility. Lacks were shown in client management (3 votes of "not present"), and autonomy (2 votes of "not present").

Concerning the hard skills (page 37): foreign lanquages 33 votes, knowledge of informatics software and of communication tools both with 29 votes, photographic techniques and capability of researching from different sources both with 27 votes, graphic techniques with 24 votes. The most developed capabilities concern technological and material process with 26 votes, technical aspects, market and competitors and manufacturing production techniques all with 23 votes. Whereas knowledges regarding costs and budgeting management are still missing, with 8 votes. From this research emerges that companies are generally happy with the performance of the students

# Conclusion.

The report provided by RAP office has been very useful to understand the feelings of the two actors (students and companies) when going through the experience together, the internship. Their reactions are coherent one another, and the overall is quite positive.

Concerning the students point of view, there is a good correspondence both between the educational plan agreed and the pertinence of the training offer, and between the goals reached and the usefulness of the whole experience. From the research, the possibility to develop the thesis inside a company appears to be not so much interesting for the students: they are more attracted by what the company offers and how the company works. Students are also available to move or travel as long as they find a good balance of the previous aspects.

Finally, students are on one hand likely to be very sure of their capabilities of working in teams and of being able of respecting a deadline: on the other hand, during the internship, they fulfilled missing aspects like competitors' dynamic and how to deal with the complexity of a real project. What they think they are still missing are the aspects related with economics and how to manage the budgets.

Concerning the companies, interest and motivation are very appreciated, and students are considered to have a good professional potentiality: students appear to be very experienced in foreign languages as well. An interesting data is the "proposition of innovative solutions" that got 35 positive answers: this information shows that PSSD students are considered to bring valuable propositions inside the companies.

The skills that are initially missing and then developed during the internship, concern technical (process, materials, industrial techniques) and economic (costs, budgeting) features. Even if client management showed some lacks, this information is related more to specific situations, since 33 votes, the majority, are instead positive.

manage the budgets.

# ONE YEAR AFTER REPORT

# Introduction.

"One year after report" is a special research case because it is a completely spontaneous collection of data made by a group of students from the academic year 2012-2013: it is named so because the survey has been sent to the participants one year after their graduation.

It is not sure the precision of the information, nor the sources they used (it has been checked that they promoted the survey in Facebook groups). that is why this research is just partially taken in consideration.

Nevertheless, it is very interesting to notice how the question about the positioning of the PSSD's raises spontaneously also in other groups of students, and how their curiosity brought them to make a report with any other income than knowing the facts.

# The survey.

The survey focused on a specific academic year, 2012-2013.

Between those students that answered, 42,5 of them are 25 years old, 20% are 26 years old, and 17.5% are 27 years old. The majority of people that answered are from Italy, with small minorities of Argentinian, Romanian, Turkish, Croatian, Korean, Chinese, Spanish and Colombian.

The majority of them is working in Italy: less than the half of this quantity is working in China, and even less in Spain. The rest is working in Australia, Germany, USA, Brazil, France, Croatia, Singapore and Colombia.

42,5% is working in the field of Service Design, 10% of them is working in the UX field.

65% of the people that answered is contracted with a full time position, whereas the 10% is free-lancing.

The 67% is working in a design firm.

The 42,5% works with less than 10 people, 5% of them is working in a start-up.

50% of those who answered believe that the method taught in PSSD is been useful in their jobs: some say that it is the core of their method-

ology, and some other instead claims that they have never received a clear methodology.

# Conclusion.

The majority of people that answered were between 25 and 26 years old at the moment of the survey, come from Italy and work mostly in Italy, or in China. The highest job trends among these people are Service Design and User Experience Design. The majority is working in a design firm, and with less than 10 people.

Concerning PSSD methodology, the feelings are conflicting: on one side, many students claim that the methodology was very useful, and on the other side other side some other students says it was not useful at all, or even non-existent.

# **CASES**

# Introduction.

In this chapter study cases of collaboration between companies and students are analyzed: these cases are useful to see how other communities link, communicate and network. This cases come from a desk research and, in particular, some of them come from a PSSD thesis called "The Flock", developed in 2011 by a students called Yanina Guerzovich. Thanks to this reference it has been possible to check the current status of the presented cases and choose the most interesting one according to the topic.

# Politecnico activities.

Politecnico is already working with companies in order to strengthen the involvement of the students with this important actor. Some examples of previous and current collaborations have been done with the following companies, corporations or institutions.

# Atellani and Museo della Scienza e della Tecnica

Studio collaboration, 1st semester 1st year enrolled students, academic year 2014/2015

During the course "Innovation studio" students had to follow the brief given by those clients, which concerned the manufacturing of a new product that would have been able to hit the target of the museum. Atellani and Museo della Scienza e della Tecnica

exchanged the production of knowledge of the students with their availability in revisioining the teams and in providing the space for the exhibition. At the end of the studio, one team has been selected by Atellani and the project has been incubated.

# Diesel

Studio collaboration, 2nd semester, 1st year enrolled students, academic year 2014/2015

within the "Product-Service-System studio" the students have been assigned the brief from Diesel, who wanted to hit the Chinese kids' market following the philosophy of the brand. Students had to make a context and user research, and to build up a

concept store for the client: in exchange of this knowledge production. Diesel selected 5 winning teams to present to the Diesel's headquarter in Milan, and reimbursed the expenses sustained during the course of the studio.

# Il teatro La Ringhiera

Class collaboration, 1st semester, 2nd year enrolled students, academic year 2015/2016

The collaboration with La Ringhiera Theatre has been done in the perspective of participating to a contest to make the neighborhood around "La Piana" (suburban area in the south west of Milan), win money to en-

hance the recovery of the area. La Ringhiera provided the students classes and support in the revision, as well as the space to exhibit the projects.

### Continuum

Curricular workshop, 1st semester, 2nd year enrolled students, academic year 2015/2016

The curricular workshop with Continuum was organized within Politecnico, but completely managed by Continuum team. They provided the topic and the resources, as well as the possibility for three selected teams, to

exhibit their own projects during an event in their headquarter.

# Other cases.

## Bocconi

The model of "in-company training" is very much used by Bocconi University, that allows its student to participate to a selection and allows students to spend period of time inside a company.

Bocconi organizes the protocol by addressing the call to a group of 15-20 students, enrolled to the current Academic Year, and by dividing the offer into two stages: a first meeting with the company at the University.

where the company gives a presentation speech to the students, and secondly a visit in the offices of the company, plus a workshop or a hands-on experience, that can last up to two days.

Bocconi organizes this events very often: currently, there are 16 training applications opened, from January 2017 until March 2017, 9 abroad and 7 within Italian borderlines.

# **Student Design Association**

It is a group of design students at the undergraduate and graduate level studying Industrial and Visual Communication Design at the University of Alberta, located in Edmonton. As students, their main goal is to gain exposure while promoting and

raising awareness of design within the local, national and international community. It is a non-profit association which uses Facebook and twitter as main communication channels on top of their website.

# **Design Matters**

"The Designmatters educational platform at ArtCenter College of Design joins collaboration with experimentation, experience with reflection, problem-solving with problem-discovery, and purpose with action.

Through research, advocacy and action, Designmatters engages, empowers and leads an ongoing exploration of art and design as a positive force in society\* (Designmatters.org)

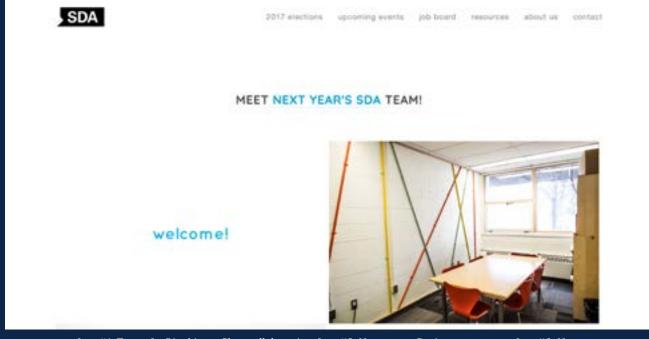
# **Design Skolen Kolding Collaboration**

"Collaboration is important to Design School Kolding. Collaboration with companies enhances the quality of the design programs and prepares students for the real world. For companies, the benefits are clear: New, research-based knowledge, innovative inspiration and creative input to solve specific challenges. Design School Kolding has, for several years, worked closely with companies

and organizations – private and public – to develop products, processes and services. And with great success. The school would therefore like to open its doors to even more partners who can help raise awareness of – and not least experience – how design processes and user-centered design can make a difference in companies and organizations."







# \_ANALYSIS

# **OVERALL CONCLUSIONS**

Both ex-students and companies are interested in **helping PSSD emerge**: they think PSSD has a great potentiality and they showed interested in being involved in the research (through the participation to the PSSD Advisory Board and the fulfilment of the Online Survey).

The overall conclusions are clear students can't explain what they are able to do, and the majority of companies doesn't know what PSSD means. Students don't get enough in touch with companies during the course of the studies, and contemporarily students can't find easily an internship during the classes, or a proper job for their position after graduating. Finally, students are missing important skills related with business, economics, UX and UI design.

Once a company gets in touch with a PSSD student during the internship, in particular, the experience of both is good. The company appreciates the characteristics, interests and motivation of the student; companies affirm the students are able to "bring valuable propositions". Whereas the students are attracted by the companies offer, and affirm to have fulfilled skills like "competitors' dynamic and how to deal with the complexity of

a real project".

Politecnico has already started to take some measures. In fact, from the Academic Year 2016-2017 students have the chance to take the optional class of UX and UI design. With the PSSD Advisory Board Politecnico has started a closer relationship with companies in order to promote the students and to get to know better the Master Course.

But still, many things can be done.

The objective of the thesis is to solve as many pain points as possible. In particular, the most interesting one, that covers the others as well and seems to be the common variable, is the contact with companies.

In fact, by getting more in touch students with companies, both the actors can get advantages: the firsts in finding a job and understanding better their positioning, the things they are able to do and the thing they like most to do. The latter, have the chance to understand better what these peculiar typology of student is able to do, and to bring innovation inside their business.

# **OPPORTUNITY AREAS**

# Overview.

If we analyze the path of the students during the years of PSSD, and underline the moments that emerged to be critical, we can operate to fix those. In particular, the opportunity areas are:

- The course
- The research of an internship / job
- The internship

As a results, these three opportunity areas seems very dense of insights and many things can be implemented in each of them.

# The course

The course is a very interesting starting point to trigger the participation of companies. The collaboration with students can be done through different ways, and some of them are already experimented: studios and labs with real clients (Atellani collaborated from 2012-2014 with the Innovation Studio course; Diesel participated with PSSD studio during the second semester of the 2014-2015 A.Y.; the theatre "La Ringhiera" was involved during the first semester of

the 2015-2016 A.Y., and many other examples), workshops with companies and design firms (like Orange and Continuum during the second semester of the 2015-2016 A.Y.), lectures of companies and design firms invited as guests during a class, extra-curricular workshops organized abroad (like Saint Etienne in the 2nd semester, February 2015, for the students of 1st year).

# The research

The research of the internship or job is a critical moment: students and ex-students don't know who are the companies that are interested in PSSD and those that can offer them a good training. Also, students, when having an interview, found it difficult to explain what they are able to do and what PSSD taught them. The research usually starts online through job recruitment platform such as Career Service (offered and managed by Politecnico), Linkedin, Meritocracy and so on.

Alternatively, students get to know offers through the help of teachers: it can happen that a professor is looking for someone for his personal business, or that he is asked by a company to provide some relevant students. Anyway, this procedure is quite frequent, and teachers are used to contact students personally or to send a request to askdesign@polimi.it, that then forward the offer to the students. In the last case, two things can happen: either students need to fill an online survey that is the first step to pass the selection, either they just need to send an email to apply for the position. Another way students find internship is by networking during events: this is increasing during the last months, since the service design related events are becoming a trend in Milan. Such events are: Service Design Drinks, UX talks, Meet The Media Guru, Creative Mornings. The most common channel to get to know the existence of these events is Facebook: but usually the

subscription to participate happens through Eventbrite, an online platform that allows people to create events, buy or sell the tickets. The events mentioned are free, which facilitates the participation of students and the creation of a big network. Students have the chance to get to know the speakers, ask questions and get in touch with the entire audience. What's more, sometimes at the end of the pitch presented by the speakers, the organizers of the event conclude by mentioning a couple of more of interesting job or internship offers: this is a recurrent activity done during the Service Design Drinks events.

Finally, students find the internships or jobs through word of mouth: in fact, if we analyze the phenomenon of Facebook Groups, ("Facebook search," 2016), which is quite recent since the first group has been created in the Academic Year of 2011-2012, it is possible to realize how much students, after graduating, keep posting news and information that could be useful to their colleagues. The most relevant and frequent are job offers and events suggestions. This supports the theory that students rather share internally these info, and don't really rely on recruitment platforms.

# The internship

The internship is a moment where both actors involved, company and students, appeared to be quite satisfied. Nevertheless, it can be improved the quality of the internships proposed, by filtering those that are not very linked with PSSD proposal, and the critical aspects emerged, such the knowledge in economics and marketing fields.

Also, they can be stressed the point where

PSSD seem to be valuable, such as the capability of working in teams, of respecting deadlines and of bringing innovative solutions inside the companies.

It is necessary to underline these aspects, communicate the value of the students, help companies training them better in the economic field, and finally making a selection of the right ones.

# The selected opportinuty area.

Even though many are the kinds of collaborations that Politecnico is already experimenting with companies, this opportunity represents the most promising one, because of many reasons.

The collaboration between companies and PSSD doesn't have any structured organization. Companies are usually involved with PSSD students because they belong to the network of a teacher/professor (it often happens that the Head of the Master is the contact between them) that explains to them the capability of the students and advertise the course, promising that, if they start a path with PSSD, an innovative change will happen. This process requires a lot of efforts and time from the point of view of the professors, because they need to convince the companies with immaterial information, just speaking about

what PSSD is able to do.

Nevertheless, this opportunity area represents a big potentiality both for students and for companies, also to trigger further collaborations (related with internships and jobs). In fact, students have the chance to go through many challenges that will help them, hopefully, in understanding their inclination: what they like to do more, which kind of company they think they fit better, and so on. Companies instead can test and verify the capabilities of many students within a safe environment, in an artificial reality where no clients or project has to be real: they have the chance to test students' abilities without risking of wasting time or money.

# How might we...?

The "How might we...?" is a very useful tool that aims to open up a series of solutions and possibilities. By brainstorming and giving answers to these questions, it can be possible to collect a big amount of options that once analyzed, understood, modified and implemented, give birth to the final idea

In view of the conducted research, of the pain points emerged during the current Customer Journey of the PSSD students, of the opportunities areas that have been selected, this thesis wants to find answers to the following "How might we...?" questions: "Get students in touch with companies before starting working?, Make students more aware of their capabilities?, Make students skills more tangible?, Make students fit better in companies?, Make companies aware of PSSD students?, Teach companies what PSSD means and does?"

The challenges addressed are many: from the understanding of PSSD, to the awareness of needing a PSSD approach in the company, to finally wanting to interact with PSSD students. The thesis needs to find a way to make all of this happen, in a fluid and natural way. The goal is to trigger companies, institutions and corporations to show them what is PSSD and to make them wanting to work with PSSD students.

The thesis wants to answer the following questions for the target selected. What is Service Design or Design Thinking? Why and how is PSSD able to do so? How can we interact with PSSD students and make a change inside our business?

# The companies.

At first instance, the scenario seems to target the students, but it is actually targeting companies. In fact, if there is not a company interested in having a collaboration with PSSD, then there is no solution for this to succeed and work. The reality is that we already have many students that are willing to work more for companies, so our problem is that companies do not understand how a PSSD can be helpful for their company. This is why we need to focus all our efforts into involving them, they are our main target.

The truth is that we cannot label and enclose the target just into "companies" because also entities, institutions, and organizations and are part of the target that can collaborate with PSSD so a more accurate way of referring to them would be actors. These actors can be divided into three

main groups or clusters: First, Companies (such as: H-Farm, big companies with more than 500 employees: that can be design agencies, multinationals, insurances, banks, etc.). Second, Corporations (such as Mare Culturale Urbano, and other smaller realities that work in a smaller scale), and Third, Institutions (such as Comune di Milano, big institutions that are connected with the public services).

These are the three main clusters of actors that will be referred as "companies" throughout the rest of the script.

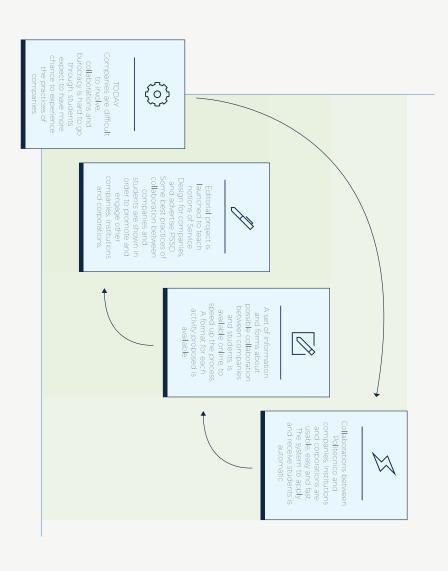
# Design concept.

In the panorama that we are facing right now, where the companies is attracted by Service Design but it doesn't know how it works, where the companies feels the need of innovate itself but it doesn't know how, where the companies believes in PSSD students' potentiality but it doesn't know what they are able to do, we need to facilitate them in learning, understanding and doing.

The companies is usually involved with PSSD students because it belongs to the network of the professors. But these last ones, don't have any material support that can collect all the reason why the companies should start a collaboration with PSSD students, and that shows the previous goals other companies achieved with PSSD. Starting a partnership is a hard job. And convincing the companies about PSSD capabilities is even harder, because they are mostly intangible. The thesis wants to give the professors involved in

this engaging process, a tool that is always growing and evolving, and that helps them promoting the course and their students.

The companies needs to read, feel and take the value of PSSD. **Read** about what Service Design is and about other related topics, **feel** what it currently happens in PSSD and how students manage to design with a systematic approach, and **take** a part of the knowledge of PSSD with them, in order to start an innovative process within their business



# Back-casting model.

The back-casting model is an exercise that helps to have a vision of the direction of the project. By assuming the highest achievement that the project wants to point, it is necessary to do some steps before that allows that goal to become true.

The highest achievement the thesis wishes to happen is that collaborations between Politecnico and the companies are usable, easy and fast. The system of sending and receiving applications from the companies and the students is automatic and it generates immediately best fit of their needs.

It is necessary to give clear information (best practices, study cases) and a set of formats of possible collaboration between companies and students. Everything is available online for the companies, to speed up the process. A format for each activity proposed is available.

To be able to build this scenario, TOUCH-PSSD is launched: the editorial project wants to teach notions of Service Design and related topics for companies, and advertise PSSD and its systematic approach to design. Some best practices of current collaboration between companies and students within Politecnico, are shown in order to promote and engage the companies. We need to teach companies what is PSSD and bring them inside Politecnico to work with the students side by side, to experience their talent in a protected environment.

The editorial project needs an organized team, that works independently but meets the Head of the Master constantly to share the direction and the goal, and to be aligned.

Giving for granted that the editorial team is set and organized, the thesis is focusing on the editorial project, on the organization of the contents and on the organizations of the activities divided by

54 Backcasting model

# Differences from "This is PSSD" and "Career Service".

### This is PSSD

"This is PSSD!" is an informative website that wants to explain and show the practices of PSSD. It is addressed to students that don't have a clear idea of what is the offer of the Master. It collects the manifesto of the Master (that aims to transmit the its values and the its approach), the syllabus (to explain the students in a visual way how the classes are administrated and when everything will take place), the teachers, the portfolio (with pictures of the projects of the students, to give a flavor of the approach), job profiles (with a list of job titles that reflect the positioning of the PSSD graduates, and pictures of the Alumni that are working in important firms), and finally other opportunities each student can achieve once entered the Master

(such as International Exchange and Double Degree Programs).

Recently, from March the 1st, "This is PSSD!" hosts also a section addressed to the companies: the label "Advisory Board" appeared in the menu. Here they are listed all the participants of the Advisory Board, and it is explained the reason why to Board was born, its goal and its further intentions.

A first input of the collaboration with companies is shown in "This is PSSD!": nevertheless, there is no interaction and no possibility of making contact with the Board organizers.

# **Career Service**

Career Service is the website run by Politecnico that collects all the internship opportunities sent from the companies that are interested in having the students from Politecnico as interns: this website is supposed to give all Politecnico Departments the same treatment and opportunities, so PSSD, that belongs to the Dipartimento di Design, is treated exactly as the other courses.

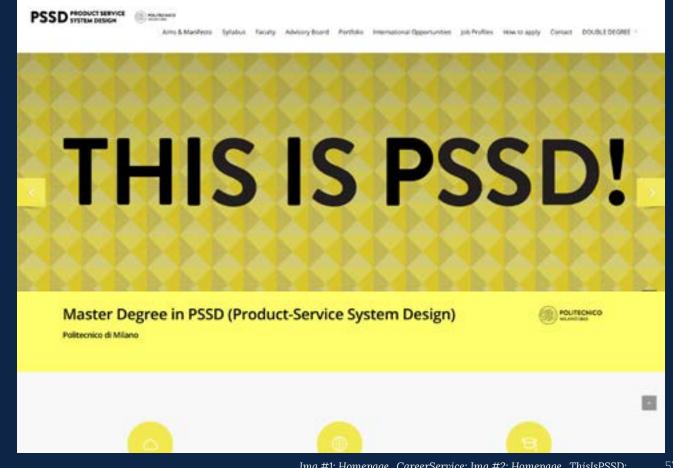
Nevertheless, PSSD is a special course: the first Academic Year has been 2008-2009, and the professional figure that it produces it has not a very clear functionality between the companies. Indeed, the page related to the job and internship propositions is a collection of offers of other courses (such as Product Design, Graphic Design, Interior Design), and very few are really related with PSSD. This is why to the question

"How did you find your actual job?" just 9.3% of the participants affirms to have founded it through "Career Service": the interesting data is that the majority founded their actual job through "word of mouth", 34% of answers, and through "social networks", 18.7% of ex-students.

Career Service provides the students internship or job position: what the concept of the thesis wants to achieve is improving the collaboration within the classes, within the Master course.



Homepage\_careerservice.polimi.it



# \_PROJECT

# **TOUCH-PSSD**

Touch-PSSD is an editorial and collaboration-supportive system that enables companies, institutions and corporations to understand what is Service Design, how PSSD is able to Design with a systematic approach, and how to collaborate with students. Through a series of articles linked by other sources, and a series of homemade contents about what happens in PSSD, the companies selected has the chance to gather information about the trends and the activities that take place in PSSD. They also can select the way to collaborate with students, through a set of activities suggested, by choosing the one that better fit with them or by assembling a customized one. Touch-PSSD follows them from the very first understanding of the topic, to the collaboration with students.

Touch-PSSD is run by volunteer students of the master together with the help pf a scientific coordinator and a customer engaging manager; they all are in charge of searching for information, transforming the activities of PSSD into engaging articles and contents, scouting interesting clients to work with, and update the activities suggested to collaborate with them.

# Offering map.

Touch-PSSD is addressed mainly to companies, institutions and corporations. It answers to three questions: what is service design, why PSSD is able to do design with a systematic approach and how I can do PSS-Design within my business.

Nevertheless, Touch-PSSD represents a tool for the teachers to get in touch with the main companies, as well as an opportunity for the students to emerge and show their value and their potential.

# Company map

By sharing articles and contents from other sources (like blogs, other companies' websites, researchers' studies ecc...), it gives to the companies a broadcast of knowledge about service design and other related topics. By publishing homemade articles about the practices of PSSD and about what PSSD students do within university, it shows the

evidencing of what happens in PSSD and what students are capable of. By suggesting to the companies a series of pre-set activities that involve students and

pre-set activities that involve students and PSSD methodology, it facilitates the contact and collaboration with the companies and PSSD student.

# Student map

By sharing contents related to Service Design, it makes the students always updated about new trends.

By publishing contents related to PSSD course and activities, it gives the students visibility and acknowledgements.
By collecting information about the main

companies, it provides the students a complete overview of the companies, institutions and corporations that are interested in PSSD Master Course and it gives the students opportunities to choose who to collaborate with (and to exchange).

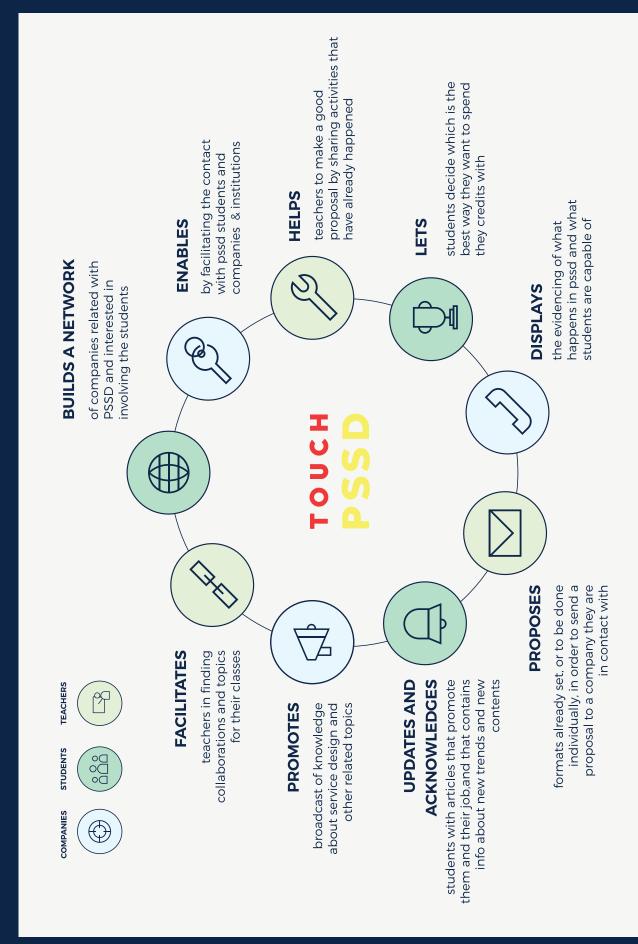
# **Teachers map**

By providing a list of current available activities proposed by the companies, it facilitates teachers in finding collaborations and topics for their classes.

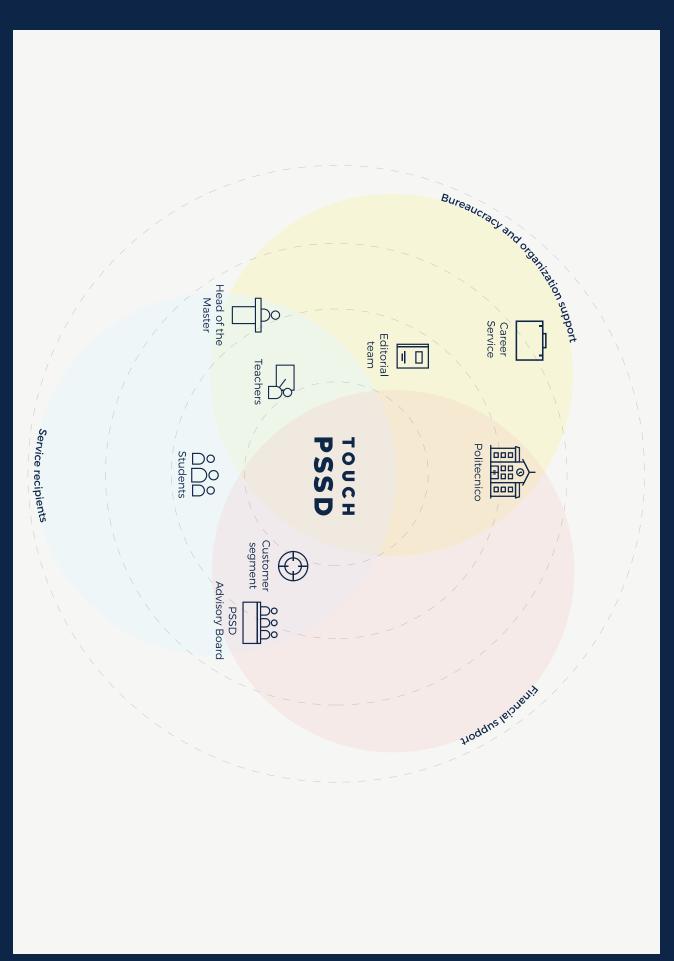
By the availability of formats set and the possibility of building a customized one, it helps teachers to send a proposal directly to

a company, corporation or institution they are in contact with.

By sharing a list of the previous collaborations and best practices, it allows teachers to check what has already happened, and plan the activities to suggest the best proposal.



Offering map 61



# Stakeholder map.

The key activities to manage for the value proposition to work, and for the companies to be hit, are: editorial, movie and graphic contents scouting, writing and sharing; organization of the collaboration formats; advertisement of the service through the channels; involvement and customer relation care of the companiess; communication of news. In the paragraph related to the "Editorial Team activities", more information about them is provided.

The stakeholders involved in the service are many, and with different degree of engagement and responsibilities. They have been divided into categories depending the reasons of their involvement:

- Bureaucracy and organization support: these are the stakeholders that manage the service, takes care of the activity planning, and provide the documentations needed for the service to work legally.
- Financial support: these stakeholders help to sustain the service, through partnerships agreement or the payment of a small percentage fee included in the taxes.
- Service recipients: the stakeholders that participate actively to the service, and that benefit from it.

The position around the service shows the grade of involvement of the stakeholders: the more they are closer, the more they are engaged with the service. We can further divide them into two main groups, depending their relevance for the service to work: they will be primary stakeholders and secondary stakeholders.

Within the primary stakeholders, the "editorial team" is the organ that administrate and manage the service. It composed by volunteering students, a scientific coordinator and a full-time contracted customer engagement manager. It takes care of feeding the editorial with contents, update and improve the activities proposed to the companies, as well as scouting further inter-

esting partners and companies interested in collaborating with PSSD students. The "companies" belongs to this group as well: it is composed by all the actors that can be involved with PSSD students, such as companies, corporations and institutions. "Teachers" are primary stakeholders as well, due to the fact that they are the main seekers of collaborations with the companies and with students.

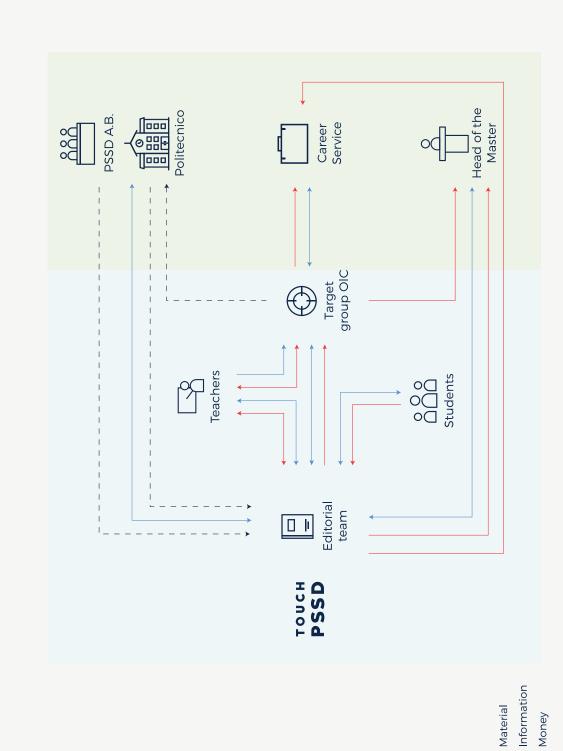
Within the secondary stakeholders, the "Head of the Master" is another important door to access partnership: its recognition makes it be always contacted by the companies to collaborate with PSSD. "PSSD Advisory Board" represents a group of elected actors that are currently participating with PSSD in a research program to improve the quality of the master: finally. "Career Service" is the provider of internships for all the students of Politecnico, and it administrate the bureaucracy of this collaboration.

62 Stakeholders map

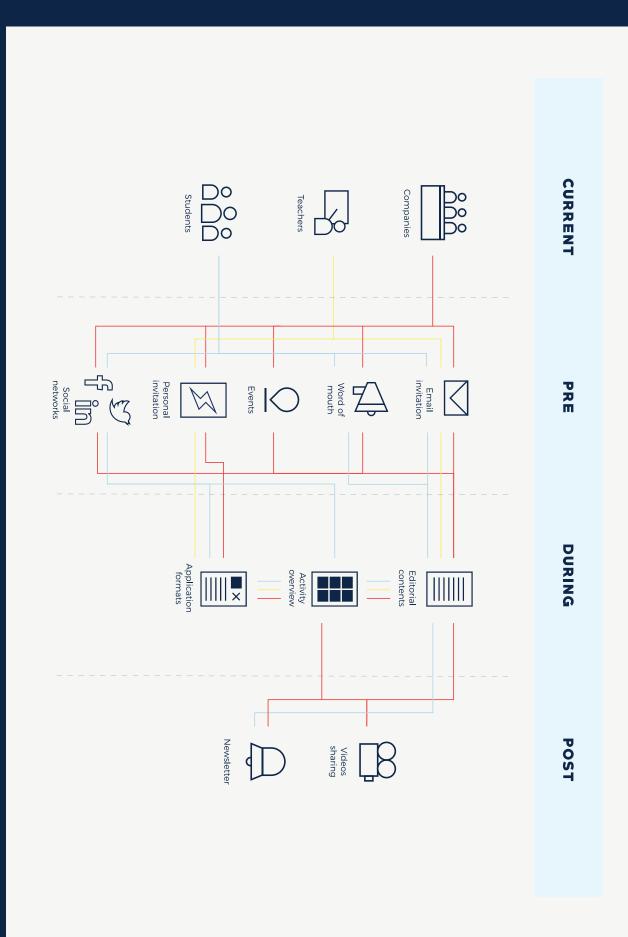
# System map.

The system map shows the flow of information, material and money within a system. It is very useful to understand how the stakeholders communicate and what their interaction regards. The system map is divided in two areas, one with the primary stakeholders, and the other one with the secondary stakeholders. The system map changes its shape depending the actor considered: in this case the companies is in the center, because the map focuses on it.

- Financial flow: the companies pays an amount to Politecnico (depending its collaboration request). Within this amount there is a small percentage fee that Politecnico then gives to the service for its sustainability. The service is as well sustained by a series of partners from PSSD Advisory Board, whom in change of visibility and a preferential treatment, are willing to pay an amount to help touch-PSSD exist.
- Material flow: it regards mainly the editorial team with the primary stakeholders. The editorial team creates each month a newsletter that will be sent to the companies, the students, the teachers and the Head of the Master. They also organize, plan and arrange the activities proposed to the companies, and they take care of the applications to the activity from both students and teachers. They collect documentation needed from Politecnico and they send it to companies. They provide finally, the Head of the Master with a monthly report that collects the main points of the month.
- Information flow: it regards the primary stakeholders. The companies sends the requests of collaborating with PSSD students to the teachers, to the Head of the Master and to the service. Students, teachers and the companies collect information about the activities from the service. The editorial team sends the collected requested in internship collaborations to the Career Service.



System map 65



# Customer journey map.

The customer journey map is an oriented graph that describes the journey of the ursers by representing the different touchpoints that characterize their interaction with the service.

Thanks to this tool it is possible to visualize the path of each user of this service. Users are labled as the companies, the teachers and students. Before the service begins,

- Promotion and first approach towards all the user starts with a mix of digital and physical touch points such as email invitation, events, personal invitations, and word of mouth Companies and students also get in contact with social networks.
- During the service, the platform is the broader touch point but within, also users interact with editorial contents, activity overview template and application forms.
- Post service involves digital interactions like video sharing and newsletter.

Digital touch points dominate the interactions with users within the service.

66 Cutomer journey map

# Channels.

Many are the channels pointed out to advertise Touch-PSSD.

First of all, **PSSD Advisory Board network** of companies that knew already about PSSD.

Then, the mailing list of the ex-alumni that is available through Carolina Cruz, and the mailing list of companies that hosted PSSD students in their business for the curricular internship, which is available through RAP offices. To communicate through a mail to all those people, it is necessary to build up a strategic invitation to open the website.

Other channels to spread Touch-PSSD are Face-

book and Linkedin groups of students, young professions, and PSSD itself. In this case, the campaign can be simply a link to the platform, followed by a short text to explain the way it works.

Last but not least, the most important campaign is run by the Head of the Master and by the whole group of teachers. Each time they have the chance to meet someone's that fit the companies and has its needs, they need to mention Touch-PSSD and link them to the platform. The way they can do it by an invitation through the Touch-PSSD platform, that will be explained later.

## Revenue stream.

In order to economically sustain Touch-PSSD, some revenue streams have been founded:

- a percentage fee to add in the cost of each activity that is started through the platform: this strategy takes advantage of the fact that Politecnico currently charges the companies when it needs to use Politecnico's resources (e.g. structure, materials, labs); for each contact established through Touch-PSSD platform, the companies will pay a fee of 10% for the maintenance of the service. For example: if a collaboration costs 1000€, 100€ would be given to the service. This is absolutely not enough to support the service, for sure not in the first months of its launch.
- sponsorship with members of the PSSD Advisory Board: Touch-PSSD is a service that fosters the collaboration between students and companies. Being part of this network is a great opportunity of advertisement. The project believes in the sup-

- port of companies through partnerships agreement that include the positioning of the logo in strategic point of the website (e.g. the footer) as well as the mentioning of the sponsors in specific moments (e.g. end of the video contents). This way of monetizing the service is very important especially in the first months of its design process, in order to build the platform and create the first editorial contents (self-advertisement about PSSD internal activities).
- an amount for the creation of a customized editorial and video content; the value of the visual and contents creation is very high. Writing and sharing articles about a topic, concretizes the experience and shows its value. This is why the service provides the creation of the contents to that part of the companies that is willing to pay for it. The editorial team will work on the writing of the article, the assembling and editing of video and pictures and the broadcast of the experiences with the pay-

ing companies through Touch-PSSD and social media channels (e.g.: Linkedin and Facebook pages of PSSD). The parameters of the prices for this service are: channels of communication, quality and quantity

of the video, property of the editorial and visual contents. This way of monetizing is essential to keep the quality of the service, pay the resources and feed the contents.

# The editorial team.

In order to make everything work properly, some key resources have to be considered: human resources (that will take care of keeping the relation with the companiess, advertising the service, feeding the contents and organizing the activities, building the user friendly online-magazine); technological resources (mainly to build the platform).

The editorial project is organized by a team of volunteering students and a number of teachers that are assigned or volunteered to follow and mentor them.

Students from PSSD are often working for other projects while going to the university, and they are very active on events and networking activities. Giving for granted that a certain number of students would like to be part of the editorial team, the team of teachers will need to select a staff that is heterogeneous. The opened applications will be: content designers, graphic and movie designers, customer engaging designers.

The announcement to be part of Touch-PSSD will be sent by askdesign@polimi.it in the same way internship proposals and other activities are currently shared; it will be advertise as well within the news of the website belonging to School of Design, www.scuoladeldesign.it. Students interested in being part of the team will be able to send the application through a Google format, by submitting CV and a portfolio of 2 projects related to the position they are applying for.

The referent teacher will be in charge of interviewing the students and selecting the most promising ones. Within those that haven't been

selected, the teacher will be able to establish a contact for further **external collaboration** (in case the editorial team need a help). The rejected students will always be able to send spontaneous articles to the editorial team, or applying to further positions in the future.

MEMBERS	SCIENTIFIC COORDINATOR	OPPORTUNITY HUNTERS	ACTIVITY CAREGIVERS	CONTENT	GRAPHIC AND MOTION DESIGNERS
1 0	Ó				[8
ACTIVITIES	Coordinating the activities and communicating with Politecnico	Scouting and communicating with the customer segment	Scouting events, contens and possible customers to collaborate with	Producing, selecting and sharing knowledge	Providing to graphical and motion material
CHANNELS	Research, Politecnico contacts	Network of companies participating to PSSD Advisory Board, Research	Events, Research	Articles, Trends Research	Graphic tools and devices
ОИТРИТ	Make everything flows correctly	New colalborations with companies, visibility of PSSD	Participate to events, bring PSSD outside Politecnico	Editorial	Videos and graphic supports

# Editorial team roles and activities.

The key activities to manage for the value proposition to work, and for the companies to be hit, are: editorial, motion and graphic contents scouting, writing and sharing: organization of the collaboration formats; advertisement of the service through the channels; involvement and customer relation care of the companiess; communication of news.

The **scientific coordinator** is a teacher from Politecnico that organizes and coordinates the activities of the editorial team: he is in charge of communicating with Politecnico's offices about the bureaucracy issues and requests. He is payed by the research check and he is full time contracted

Minimum people in charge of this position: 1

The opportunity hunter is in charge of scouting and communicating with the companies. Thanks to the network of companies provided by PSSD Advisory Board, and its own personal entourage of connections, he is able to do advertise PSSD and involve new companies, institutions and corporations in working with the students. He is as well business oriented, that's why he needs to scout partners that are willing to promote economically Touch-PSSD. He is a full-time contracted employer.

Minimum people in charge of this position: 2

The activity caregivers are those that need to scout events and promote constantly Touch-PSSD within the new realities that fit the selected companies. They also need to answer and maintain the relationship with the companies that sends collaboration forms through the website. They need to manage the proposals of the companies and suggest the most suitable format in case it needs help. They have to be all internal to the Touch-PSSD service.

Minimum people in charge of this position: 2

The **content designers** will have many responsibilities: they will be scouting, selecting and sharing articles and information that belong to other

sources; they will **participate to events**, interview guests, companies and other interesting people and they will write and share the relative articles; they will also select the contents sent by other students that participate as external collaborators. Minimum people in charge of this position: **2** 

The graphic and motion designers have a practical role: they take care of the branded material (pictures, layout of forms), and of taking pictures and filming, assembling and editing videos for specific occasions (an event, an interview, etc.). They don't need to be internal to the team, they can be also other students from PSSD that collaborates externally.

70 Editorial team activities

### The platform.

Touch-PSSD is a service that covers two main activities: the editorial contents and the collaboration proposals.

Lately the trend of Service Design is increasing in Italy, and the demand is raising. But many companies don't know what this means, and most of all they don't know how PSSD can manage Service Design goals with its systematic approaches. PSSD organizes each year some exhibitions, and participates with some projects of the students to other events organized outside Politecnico: usually students spread the voice through Facebook, but few are the people that know about them, and they could actually increase the par-

ticipation (eg: when the exhibition/event regards a neighborhood).

Touch-PSSD wants advertise this kind of activities by creating visibility around them. How? It is needed to write and share PSSD knowledge. The editorial offer answer to the question "What is Service Design?" and "How can PSSD design with a systematic approach?" The goal of the editorial offer is to educate companies and bring awareness around PSSD. The editorial contents will be accessible to everyone: exactly like an editorial or a blog they can be read and shared in social media

#### The editorial offer.

The editorial is fed by the content designers, together with the help of the scientific coordinator who is in charge of managing the overall of the service. The content designers have to scout interesting things happening inside and outside PSSD, research about them and write the related articles.

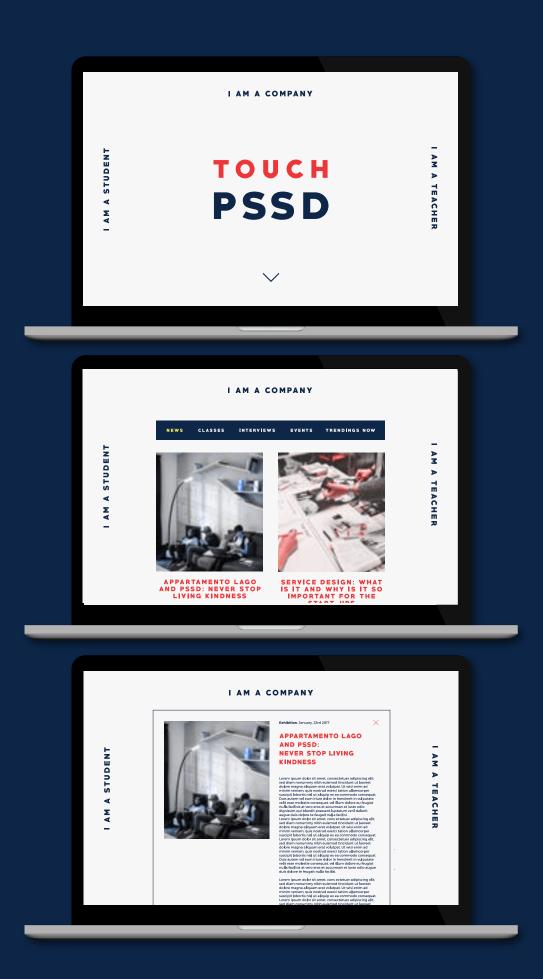
Some examples of the topics treated are:

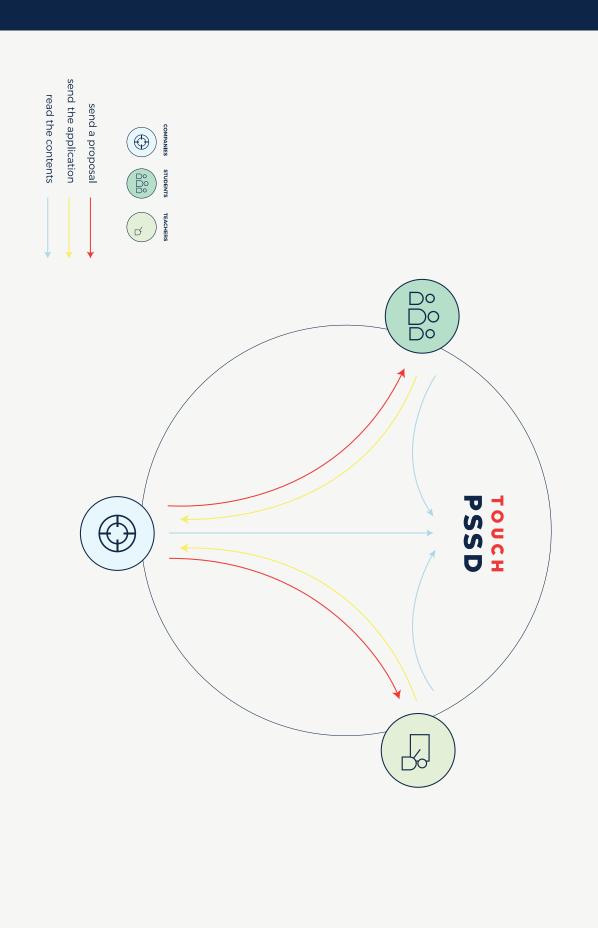
- **Events** in Milan related with Service, Strategic, UX design
- Exhibitions of internal projects
- **Exhibitions** of other design schools in Milan
- Service Design **projects** launched in Milan
- **Activities** organized by PSS students
- Service Design Tours ventures
- News about **startups** in Europe with a focus in Milan area
- **Interviews** to emergent and famous people in Milan

- **Collaborations** between the companies and PSSD, within and outside Politecnico.

Where it is needed (payed and required by the companies), the articles will contain video and graphic documentation and explanation of the contents, taken care by the graphic and movie designers. The editorial team can also receive articles written by other students from PSSD, which they have to select and publish if promising: in each article will be written the name of the author.

A part from homemade contents, the editorial team is as well in charged to **scout contents from the web** and add them in the website: viral articles, videos and infographics about Service Design and related topics, are linked in the platform to build a sort of record of PSSD. These contents will be found under the voice "trending now".





### Collaboration proposal offer.

From the conducted research it has emerged that students don't get enough in contact with companies during university studies. To provide for this lack, the other offer of the platform concerns a series of collaboration proposals that the companies and the students can do together, in order to get to know each other better. If the editorial contents were available for all the people surfing the platform, this offer is related just to the three beneficiaries of the service: companies, students and teachers.

To access this offer it is necessary to log in the system: each of the beneficiary group has a personal area where it can see the activities proposed. The interaction between the beneficiaries and the activities are different (see the map).

- Companies: this is the beneficiary to whom the service is more addressed to. It can see the set of activities proposed, make its own activity offer or seeing other's companies experiences with PSSD. The registration process for the companies is the same as the one from Career Service: it can log in with the same credentials. Once it accesses, it has the possibility of surfing throughout the offered activities, investigating their details and selecting the one they prefer. After filling the forms, it can send the application and wait for an answer from the editorial team. If the activities suggested don't fit its expectations, in the section "build your own" it is able to create a customized one by assembling the proposed exercises: it can as well suggest a new exercise for the students. Once they finish, it sends the proposal to the editorial team with the same form and wait for the answer.
- Teachers: they have a hybrid behavior. On one side they can pick an activity or build a set of exercises and send the proposal to the companies: on the other side, they can apply to one of the activities launched by the companies. In the former case, they are creating a contact with the companies by sending

an invitation form; in the latter case they are applying to an offer proposed by the companies. They can as well check the previous activities done.

- **Students**: they are able to see the previous activities and to send application to participate to the ones suggested. They are able to read the program of each activity the companies is offering it, the teachers that will take part to it, and if it contains or not CFU credits. If they want to apply, they need to fill an online format and upload some documents.

75

74 Map of the activities that can be done from the actors

#### The activities.

The set of the activities suggested has been investigated during PSSD Advisory Board. One of the exercise of the board has been to delineate the kind of collaboration they wish to establish with Politecnico students: from more than 30 answers, these are the combination selected. In the layout of the platform, the activities are divided by duration.

- From 1 to 3 weeks: here the short term involvement activities suggested are "Presentation of professional projects", "Field research", "In company workshop", "Professional workshop".
- From 1 to 3 months: the activities that fit this quantity of time are "In company training program" and "Project based collaboration"
- More than 3 months: these are the long term activities suggested "Design studio course", "Internship", "Thesis development", "Incubation program".

The activities visualized can be expanded to read details of each one: what is that specific activity, what the applicant should provide for the activity to work, the benefits it earns, and who has already experienced that activity. From this overview, the applicant can understand what it is expected to happen in each activity, and which one fits better its needs. It has to be remarked that the activity named "internship" is linked with Career Service provider: the form that the applicant will fill, and all the documentations needed, pass through Touch-PSSD service, but just as a channel to connect with Career Service. The request goes directly to Career Service that manage the bureaucratic aspects. For each duration, one activity has been explained more deeply





# H-FARM INVOLVEMENT

#### Who is H-Farm.

H-Farm is an Italian company that aims to shape talents, to help young entrepreneurs in launching their businesses and to support the digital transformation of established firms.

H-Farm is divided into three main departments, that take care of different companies: H-Farm, H-Farm Education, and H-Farm Industry.

"H-Farm" is the incubator: it looks for interested investors and it scouts emerging startups; "H-Farm Education" takes care of the campus, of the school programs and university programs; "H-Farm Industry" is the one involved with firms and companies, and it enables consultancy and innovation within them.

### Why H-Farm.

Many are the reasons why H-Farm is being used as a case to show the use of Touch-PSSD.

First of all, it is a place that drives innovation and digital transformation within an enormous variety of realities: schools, startups and firms. Basically everything: from the education of young talents, to the first step in the business world, to the advocacy for structured companies.

H-Farm is the approach of Design Thinking for two cases: outside the company (it organizes meetings for big firms in many formats, such as Bootcamps, Hackathons, Garages), and inside the company to develop internal projects. It has developed as well a corporate toolkit, "Design Thin-Kit" that shows all the steps of their methodology.

Nevertheless, H-Farm is already involved in PSSD Advisory Board: Enrico Girotti, Head of Design and Elena Crudo, Content Design Coordinator, took part in the first meeting of the Advisory Board. Last but not least, H-Farm has already been in contact with students from Product Service System Design, such as Serena Leonardi and Chiara Leonardi, that had their startup selected and incubated in H-Farm, and now collaborate with H-Farm as freelancers.

#### Previous collaborations between H-Farm and Politecnico.

H-Farm is always looking for talented students to collaborate with: their involvement usually concerns the possibility of funding their startup, their support during Bootcamps and other activities, the proposal of an internships or a job position. H-Farm already has contracted two students from Politecnico: Giulia Carlon, industrial designer, and Claudia Zampella, PSSD Designer.

In June 2016, H-Farm sent a request to the students of PSSD, through askdesign@polimi.it. The email contained an invitation to take part to a Hackathon organized in collaboration with Lilly, a presentation of the Hackathon and the agenda, and this following message:

"It is a Hackathon on the pharmaceutical sector through the company Lilly that will take place in H-Farm on 21 and 22 June. http://www.h-farm.com/en/lilly-digital-accademia/. Enclosed a small description with the program (sorry it's in Italian but the activity will be all in English)".

The participants of the Hackathon were 130, counting people working in the firm belonging to different departments (marketing, communication, management, chemistry, sales), people external to the firm but related with the brand (like pharmacist and doctors), patients and designers.

Nevertheless, the structure of the Hackathon didn't involve the PSSD participants in a structured way. Few have been the applications sent (just two PSSD students participated, Federica Ranieri and Martina Rando), and the contribution of PSSD students was related just to the generation of ideas according to a given brief.

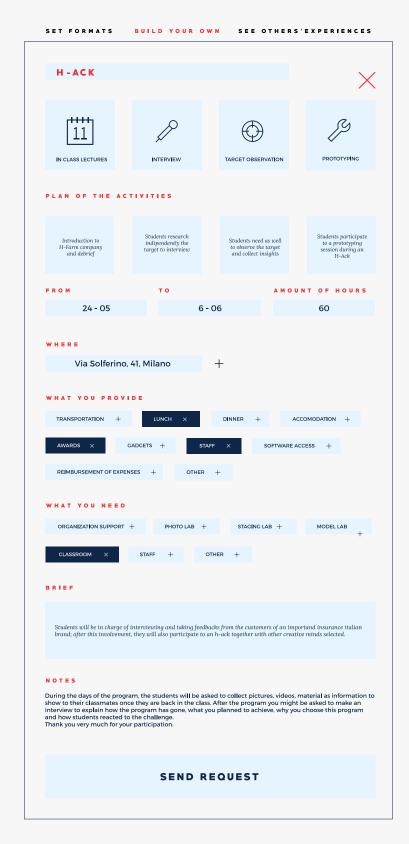
PSSD students have been assigned one to different groups: the heterogeneous combination of the participants in the groups has been the key of the success. Students had to deal with people from different backgrounds, different skills, different ages.

During the Hackathon, they had been using Design Thinking methodologies, which enabled PSSD students in being a step forward compared to their group mates from IED or NABA, and consequently their help has been fundamental for

the development of the process.

H-Farm knows that these students can do more, and that they can help in other steps of the solution. This is why H-Farm would like to use the Touch-PSSD platform; to check what PSSD students are able to do right now, to have a panoramic of the activities that they can do with them, to model its own activity proposal and to get in touch with Politecnico in a fast a structured way.

# **ACTIVITIES**



### The "H-ack solution".

In the second half of March 2017, H-Farm expressed the intention of engaging PSSD students in a new H-ack organized for Assicurazioni Generali. H-Farm, together with its client, wants to involve students in the research phase and in the generative phase.

Students will work on their own for the research part, and will spend one day of h-ack with the rest of the participants. Likewise, students are very busy in this moment of the year, since they are finishing the second semester studios (both the first and second year enrolled students) and they are approaching the curricular workshop: this means that H-Farm can't demand Politecnico to treat this activity as a compulsory one, because students have their CFU already set.

Thus, H-Farm has to be fast and clear in proposing the collaboration: the faster the agreement is set, the earlier students can apply and start the research part on their own and be able to participate to the h-ack as well. In order to build the collaboration in a structured, quick and readable way, Touch-PSSD would be very helpful: it would also be a more effective broadcasting tool to spread the knowledge of this event within students.

80 Format filled by H-Farm

# Storyboard

H-Farm gets to know Touch-PSSD through an email sent by the PSSD Advisory Board (of whom it is part of) organizers to all the participants to check the new service available that facilitates them in choosing and organizing the better way to collaborate with PSSD students. H-Farm surf the events published in the editorial, checks what have been lately the practices of PSSD, and finally enters the private area, where it logs in through the credentials already in its possession (because it is a user in Career Service).

Once it is inside the private area, it surfs the set formats of the activities proposed, but no one fits its requirement. This is why it goes to the section "build your own" and starts assembling the activity: it chooses: "in class lecture", "interview", "target observation" and "prototyping". It names it "H-ack Life", it keeps feeding the form with the other information needed and it sends the application.

It receives an email with the confirmation from the editorial team.

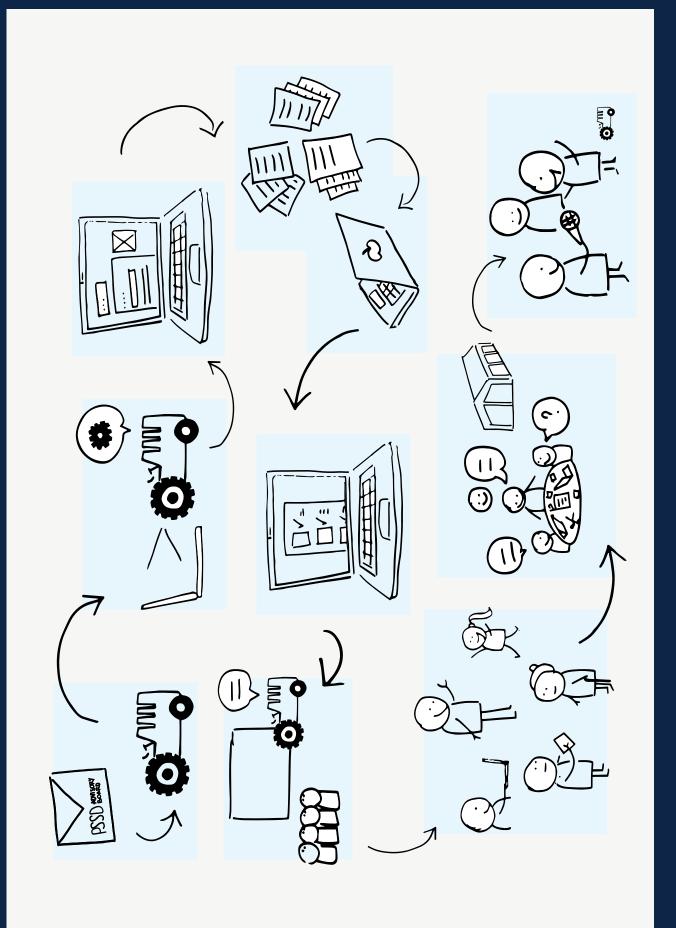
A couple of days later, when the editorial team has analyzed the application, H-Farm receives the documents to fill and the costs for the collaboration. H-Farm sets with Politecnico a date to meet and sign the papers and to start the collaboration with students. Meanwhile, the application is transformed into a proposal for the students, and it is sent online so that it is available for them. H-Farm meets the students from Politecnico, share the brief and the activities it expects them to do. Students make their research and meet H-Farm the day of the H-ack. While the H-ack is progressing, the editorial team documents the activities and collect material for the report.

The activity has finished, H-Farm team gives an interview to the editorial team, and greets the students whose participated with an award.

# Blueprint.

The blueprint map is a tool that enables the visualization of all the activities that have to be done in order to make the system work fluently. The blueprin map analyses the pre-during-post service (like the customer journey), with a special focus on those actions that the final user is not able to see. The blueprint as well helps in highlights possible paint points of the system.

The storyboard of H-Farm and Touch-PSSD has taken in consideration to build the blueprint map of the service and to understand which touch-points the service needs, which are the interactions that the companies does with the service, and finally which are those activities the service needs to provide in order to make the flow works for every beneficiary.



82 Storyboard 83

	PRE		DURING			POST		
CUSTOMER JOURNEY	H-Farm has been invited to PSSD Advisory Board and it is now an active member of the board.	It received an email from PSSD Advisory Board with the invitation to enter Touch-PSSD to discover the new service that facilitates the collaboration with the students.	H-Farm knows what Service Design means, but it can see now all the activities PSSD students are used to do.	H-Farm wants to start collaborating with them but none of the suggested formats fit its needs. It decide to build up its own collaboration format. It fills the document and send the application.	It receive some days later the answer from Touch-PSSD with the terms of the agreement. H-Farm accepts and confirms the participation. It can check the program agreed and see the number of the students applying.	The collaboration is confirmed and H-Farm meets the students in the class: it talks about the company, about the current project they are involved in and it launches the brief.	Students make their research and meet H-Farm and the rest of the people involved in the program. The activity goes on and everybody participates.	The activity has finished: H-Farm and the students can share their impressions about their collaboration.
TOUCHPOINTS	Networking events	Email invitation	Editorial contents	"Format set" page "Build your own format" page	Confirmation mail Documents to fill Students application	Guidelines of the program		Interview and online survey
line of inter	ractions  Send the invitation by email to participate to PSSD Advisory Board. Receive the confirmation.	Send the invitation by email with the link to Touch-PSSD website. Publish an article in different online channels.	Send an article to publish, or send a proposal to advertise an event	Show the different kinds of opportunities proposed, divided by typology of company and by period of duration.	Exhange of information and documentations to start the process.  Format is available for the students to apply.	Confirmation of the collaboration, email with the information about the hour and the classroom of the first meeting.  Sharing the details of the first meeting with the students.		Students answer to the online survey through an invitation sent by email
OFFLINE	Suggest talks about PSSD Master of Science, PSSD students, trends in companies, about what they need and are looking for, about Service Design. Enable the networking of the participants.	Word of mouth to advertise the service, taken care by the Head of the Master, the teachers and the editorial team	Promote the possibility of writing the articles within students and teachers.			Meeting between company and students.		H-Farm share the feelings and the outcome of the experience through an interview
line of visibility							. – – – – – – – – – –	
FRONT OF STAGE	Event managing, keynoters scouting, flyers and acitivities.	Align the teachers with the brand-new service Touch-PSSD. Contact the PSSD Advisory Board staff and convince them to send the request.  Promote Touch-PSSD through different online channels one to one (RAP, askdesign@polim.it, etc) and public (Linkedin, Facebook page, and more)	Receive the articles from the students or the teachers, select and publish; or write and publish homemade contents.	Organize the set activity formats and the singular ones.	Analyse the request, prepare the documents for the agreement.  Send the information to Politecnico.	Setting of guidelines, shipping through email. Setting the working space. Recording and documentation of the activity.		Set up the meeting for the interview, prepare the questions to ask H-Farm. Prepare the survey students have to fill. Collect and analyse the results. Record, edit and assemble the interview.
BACK OF STAGE	Activity organization, printing material, setting the location	Build the website, make it responsible for the different supports. Write an article to promote Touch-PSSD.	Scouting of events and news about Service Design, in Milan and online.	Create filters within the platform, useful to propose the right activity to the right target group	Publish online the program for the students. Collect and connect applications sent from the students to the right activity addressed.	Bureaucratic documentation is collected and stored. Videos, audios and contents collected during the activity are edited and assembled.		Share the results of the survey and of the interview online, in the page connected with the case.

Blueprint 85

# **TOUCHPOINT VISUALIZATION**

### The homepage.

The three main users of the platoform are companies, teachers and students.

The homepage is organized in a way that allows the users to enter immediately their own personal area, and by scrolling, it allows the visualization of the editorial contents.

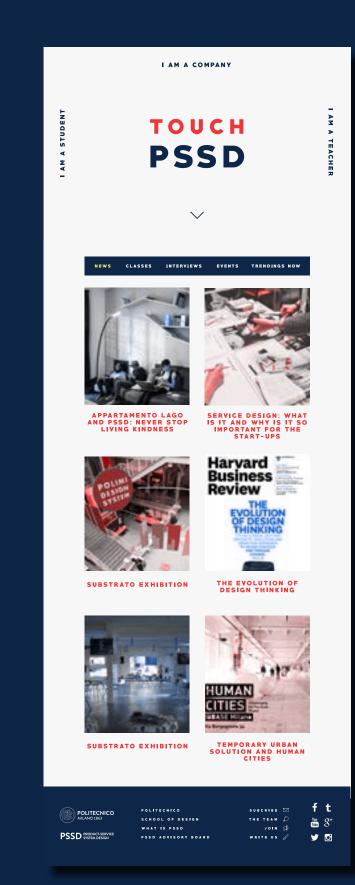
The layout is very simple and clean, with few inter-

actions to do in order to access the two contens. The inspiration for the design of the homepage has taken by the recent uploaded trends by Fjord, accessible at this link: https://trends.fjordnet.com/trends/ (Fjord, 2016).

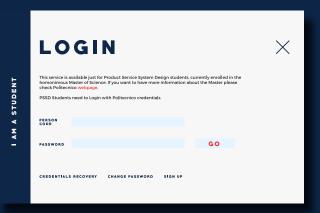
### The editorial contents.

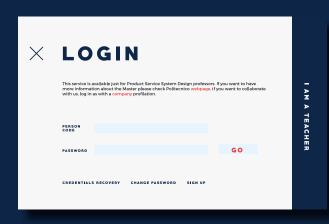
The menu related with the editorial contents, which sticks in the top of the page once scrolled down, divides the contents into categories that facilitate the user in finding the topic researched. These categories are:

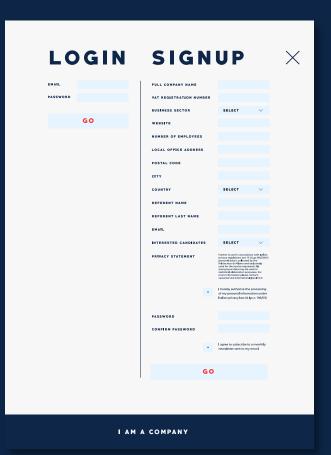
- **News:** it contains the latest uploads of all the categories.
- Classes: here the content designers promote the most interesting activities done within the classes of the course, tools explored, or initiatives related to the topic of the class/lab.
- Interviews: in this case the content designers together with the support of the motion designers, will be in charge of publishing articles and videos that shows the interviews done with PSSD guests or other interesting people related to the topic.
- Events: in this typology of contents, the most interesting events happening around the subjects of PSSD, hosted outside and inside Politecnico, will be described by the editorial crew, with interviews to the guests and to the participants, pictures of the events, and the explanation of the themes

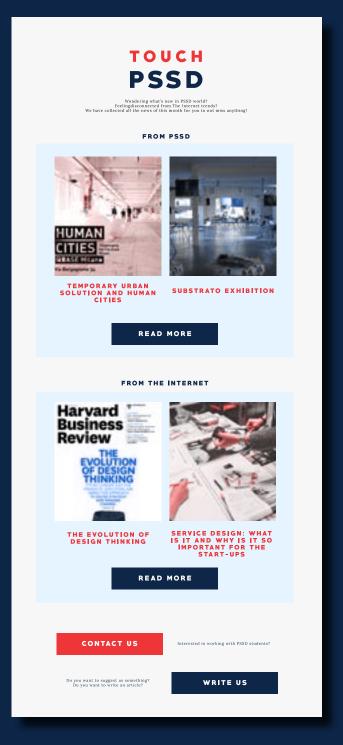












discussed.

- **Trends**: is the category related with the current viral contents, related with PSSD approaches and arguments, that are spread in internet. This category is constantly uploaded with the links and the references of the other sources and it allows students, companies and teachers to have

a record of trends.

The articles will be correlate with pictures and video (when needed), and it will contain the name of the students that wrote it (if it is part of the editorial team and if it is outsider of the editorial team), and the name of the students that took part to the pictures and movie shootings.

# The log in.

The log in and the sign in happen in different, ways depending on the actor who's entering the system.

For the companies, if they are already authenticated by Politecnico, the log in happens through the same credentials already given by the Career Service portal. If they have never subscribed to any service provided by Politecnico, the sign in process follows the same steps and requirement than the one from Career Service portal. The information needed have been checked on Career Service portal. Once they insert all the credentials, they are in the big data base of Politecnico.

By entering the Touch-PSSD service, they can decide whether or not receiving the monthly newsletter containing all the news about the performances of the service and the updates about students' activities.

For teachers and students the log in happens with the credentials from Online Services. They could also subscribe in Touch-PSSD, but the possibilities they do so before subscribing to more important channels (like Online Services), are very few. They receive the monthly newsletter automatically.

### The newsletter.

The newsletter reaches the students, teachers and companies once a month, and it is updated by the content designers. It is divided into three layers: one containing articles related with what happens within PSSD (classes, collaborations, exhibitions); one with the news from the internet (could be articles with trends spreading around the social networks, or events happening in Milan, cool conferences around the world); the last one with the contacts to work with Touch-PSSD and to collaborate with the students.

It graphically follows the layout of the platform, characterized by few object and a lot of spare

space.

# The companies' flow.

Once the company loges in, it visualizes a page containing the pre-set activities: these activities are assembled and organized by the touch-PSSD team, and have an output set. The page allows companies to see the activities organized by duration: the division of the activities depends on the previous collaborations PSSD has had with companies, which follow this length approximately.

In the menu, clicking over "see the others' experiences", the company can check the best practices of Politecnico together with other clients. In this way, the company can have an idea of the quality of the works, and can collect the impressions of the others to understand if that activity really fits its expectations.

Going back to the "formats set" voice of the menu, companies can open each activity suggested in order to check the details related. These details explain: in what the activity consists, what companies need to provide to make that activity, the benefits that are expected to receive from that activity, and finally the best practices of other companies working on that same activity.

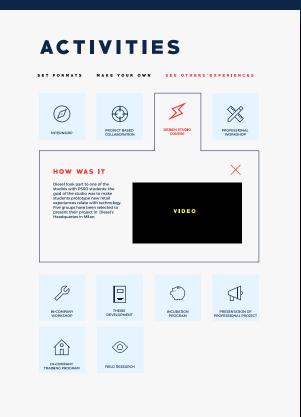
Once the company choose one of the activity, it will have to fill a format to start the collaboration. The company has to give information about the period of time of the activity, in terms of dates and of hours; the location of the activity, the plan of the activities and the brief for the students. Also, it needs to express what it is going to provide for the students participating, and what it needs from Politecnico. Finally, there is a note underlining that, if they want the activity to be filmed and promoted in the platform, they need to sign documents and pay a fee for this extra service.

Once this format is filled, they can send to Touch-PSSD staff which will analyze the offer and make a price for the activity proposed. This further communication will happen through email.

Another method to propose an activity collaboration, is to make it by their selves. Companies can click on the voice "build your own" and they will visualize a set of exercises that they can assemble in order to build a brand new and customized proposal. If they click on the exercise, they can see the explanation of that specific exercise, if they drag the exercise into the down blue bar, they are adding it to the proposal. After having selected all the exercises, they will need to fill a format: this format is based on the one previously explained, but it contains a deeper description of each activity the company suggests to do with PSSD students.

Once they complete to fill the selected format, they send it and they receive a notification and an email with the successful confirmation. From now on they will keep writing through emails to the touch-PSSD team, that will provide them an economic offer and all the papers needed.











# **ACTIVITIES**

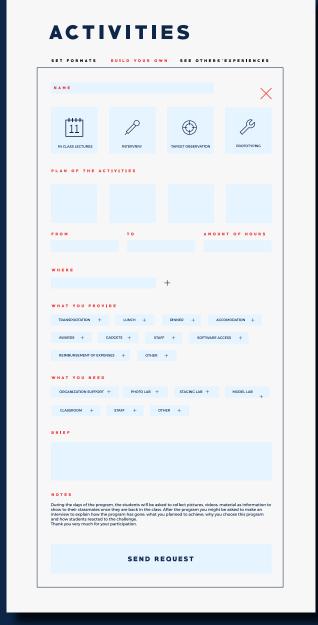
















### Teachers' flow.

The login of the teachers happens through the same credentials as the Online Services. Teachers are the hybrid beneficiaries. They can apply to an activity proposed by the companies, or they can suggest a new activity and send the invitation to a companies.

They basically have two possible formats:

- Companies - Teacher: here they need to show their interest and their motivation in the activity suggested from the companies. They need to send a motivation letter to explain the reason why they want to give their support in that specific activity.

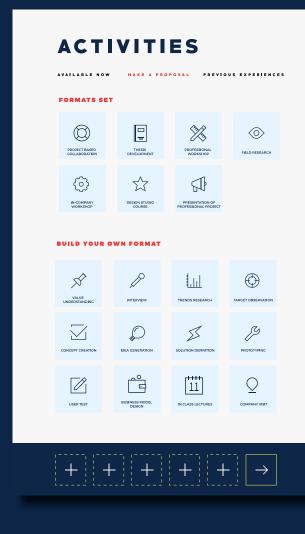
This option has considered that companies might need the help of Politecnico staff, so we need to provide them a tool that allows them to contact the staff. When companies launch a program, this will be first visualized by teachers, that can apply as already said, and then, once the number of the supports needed is joint, it will be available also to students applications.

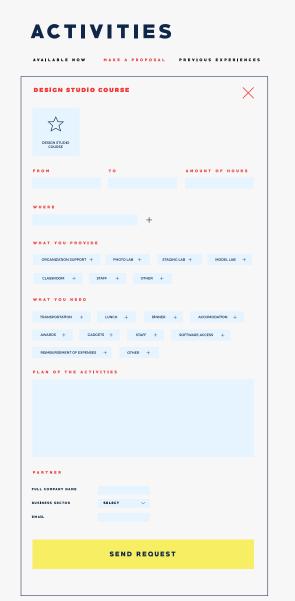
- Teacher - Companies: here they choose from the suggested activities or they can build a new one customized to their needs, with the same process as the companies does. They can insert the information of a company, corporation or institution they are in contact with or they want to propose the activity to, to send the program directly to them. In this format there is a spot where teachers can type the email of their contact: the proposal will be sent directly to the page of the addressee.

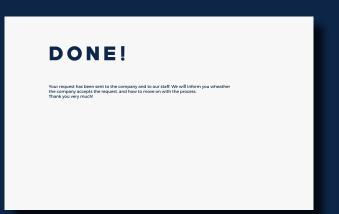
This option has been considering that teachers, being also independent professionals, usually act like sort of bridge and connection between companies and Politecnico. The case that companies establish a first contact with a teacher is very frequent, so teachers need a tool that fa-

cilitates them in communicating with the companies once they established the first contact (maybe the company is a client or a friend of the teacher).

Once the teachers sent the proposal or the application, they will receive feedbacks or confirmation depending the typology of path. Documents will be signed and the participation can start.







### Students' flow.

The students can log in with the Online Service credentials. Once they are logged, they land to a page that contains all the available activities they can choose to participate to. They can as well open the activities and see the details for each one. Some of them unlock a number of credits for the students, depending on the quantity of hour they need.

In the format addressed to the students for the application, they need to upload information about themselves, to be selected for the activity they are applying for. The documents they need to upload are: curriculum vitae of maximum one page, motivational letter between 600-800 words, PDF portfolio with a selection of three projects to spread in 3 pages for a maximum of 5MB. In particular, each upload is described as follow:

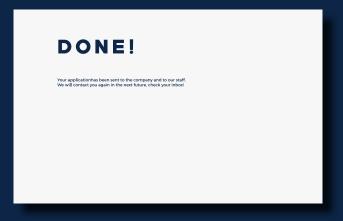
- **Curriculum**: "The Curriculum has to be of maximum one page, in PDF format. Make sure you add to the CV the sentence "Autorizzo il trattamento dei dati personali ai sensi dell' art.13 del D. Lgs. 196/03" which is crucial for a company to take you in consideration."
- Motivational letter: "The motivational letter has a crucial role: it really shows that you are interested in the company and in the experience it provides. So be careful and precise: introduce yourself, explain why you are interested in the company, and why you want to take part to the activity. The letter is suggested to be maxim one page long."
- Portfolio: "The portfolio has to be in a PDF format, it has to contain a maximum of 3 projects, and it has to be as big as maximum of 250Mb. You can as well link your online Portoflio in case that the company is interested in looking for further information, but this is not compulsory."

They are sent a notification with the confirmation of the submission. They will be further contacted by mail to confirm their participation.









# \_CONCLUSION

The thesis has been working on the awareness around the potentiality of PSSD students in the job world. Stating that PSSD students are considered to bring valuable propositions inside those companies that have had the chance to work with them, the thesis has investigated the topic of how to promote correctly the students in the other companies.

After the analysis of the point of view of both students and companies, the conclusions achieved confirm that the main pain points of this relationship are the lack of awareness about the topic and the few moments where companies and students meet each other. This is why the solution proposed in this thesis is about on one hand, educating companies about the subject matter and on the other hand, implementing and promoting the collaboration between the two actors: Touch-PSSD is an online editorial and collaboration-supportive service that enables companies in understanding the practices of PSSD and it gives them the chance to collaborate with the students through different options/activities.

Thanks to this service PSSD is able to promote its course and its students through the editorial contents, companies are able to understand and test the students through tailor made activities, and students are able to experience different kind of approaches and have a broader understanding of the job world.

The importance of this service is not only related to the current present: PSSD practices and methodologies, inspired to the human centred, service design, sharing economy (and many others) pillars, are becoming trendy all over the world. Politecnico di Milano is one of the few Eurpoean universities treating this arguments: launching this service would be a true opportunity to raise its international recognition also in this field.

Touch-PSSD is an opportunity to bring the practices of PSSD Master of Science outside the walls of University, in the real world.

# BIBLIOGRAPHY

Accenture. (2016). TRENDS IMPACTING DESIGN AND INNOVATION. Retrieved from https://www.accenture.com/\_acnmedia/PDF-1/Accenture-Fjord-Trends-2016.pdf

Agrawal, S. (2014). *How Companies Can Attract the Best College Talent*. Harvard Business Review. Retrieved from https://hbr.org/2014/03/how-companies-can-attract-the-best-college-talent/

Brown, T. (2008). *Design Thinking*. Harvard Business Review, (June), 85-92. https://doi.org/10.5437/08956308X5503003

Brown, T. (2009). Change by Design. (Harperbusiness, Ed.).

Burns, C. (2006). Transformation Design. London: Design Council.

Career Service. (2016). *Dati Occupazionali*. Retrieved November 30, 2016, from http://cm.careerservice.polimi.it/dati-occupazionali/#des--product-service-system-design

Carella, F. (2015). D E S I G N Power. Politecnico di Milano.

Cutler, T. (2004). Creative Communities. Work, (March), 1-6. https://doi.org/10.4135/9781412971959.n84

Dam, R. F., & Siang, T. Y. (n.d.). *How to Develop an Empathic Approach in Design Thinking*. Interaction Design Foundation. Retrieved from https://www.interaction-design.org/literature/article/how-to-develop-an-empathic-approach-in-design-thinking

Dam, R. F., & Siang, T. Y. (2016). *Design Thinking: Get a Quick Overview of the History.* Interaction Design Foundation. Retrieved from https://www.interaction-design.org/literature/article/design-thinking-a-quick-overview%5Cnhttps://www.interaction-design.org/literature/article/design-thinking-get-a-quick-overview-of-the-history

Edward James Consulting Ltd. (n.d.). Flourishing Business - Tools for the Strongly Sustainable Revolution - Financially Rewarding, Socially Beneficial, Environmentally Regenerative. Retrieved March 13,

2017, from http://www.flourishingbusiness.org/

Guerzovich, Y. (2011). The Flock. Politecnico di Milano. https://doi.org/10.2307/1576606

Hegeman, J. (2014). *So you want to be a Service Designer.* On Becoming a Better Therapist, 3–32. https://doi.org/10.1109/EMR.2006.261382

Ideo. (n.d.). Design Kit. Retrieved January 8, 2017, from http://www.designkit.org/

Kolko, J. (2015). Design thinking comes of age. Harvard Business Review, 93(9), 66-71.

Livesey, F., & Moultrie, J. (2008). *Company spending on design: Exploratory survey of UK firms 2008.* University of Cambridge Press.

Lewin, K. (1946). Action research and minority problems, Journal of Social Issues, 2(4), 34-46.

Margolin, V., & Buchanan, R. (1996). The Idea of Design. (The MIT Press, Ed.). Cambridge.

Marina Terteryan. (n.d.). Why Service Design Thinking. Retrieved October 28, 2016, from http://www.whyservicedesignthinking.com/

Martin, R. (2015). Design as Strategy. Harvard Business Review, 93(9), 2-3.

Meroni, A., Bala, P., Ciuccarelli, P., Collina, L., De Leeuw, B., Jégou, F., ... Vadovics, E. (2007). *Creative Communities, People inventing sustainable ways of living. Work,* (March), 1-6. https://doi.org/10.4135/9781412971959.n84

Micheli, P. (2014). *Leading business by design: Why and how business leaders invest in design. Design Council.* Milano, P. (2015). Tirocini e Stage.

Milano, P. di. (n.d.). *Aims & Manifesto | Master Degree in Product Service System Design*. Retrieved November 9, 2016, from http://www.pssd.polimi.it/aimsmanifesto/

Milano, P., & Riccardi, A. L. (2011). *Dipartimenti*. Retrieved February 19, 2017, from http://www.polimi.it/ricerca-scientifica/strutture-di-ricerca/dipartimenti/

N.I. (2016). One Year after Report.

Pertuze, J. A., Calder, E. S., Greitzer, E. M., & Lucas, W. A. (2013). *Best practices for industry-university collaboration*. Mit Sloan Management Review (Vol. 51). Retrieved from http://sloanreview.mit.edu/article/best-practices-for-industry-university-collaboration/

Remondini, M., & Meroni, A. (2015). *Understanding the role of product-service system designers with-in service design agencies in London*. Politecnico di Milano.

Rohan, G. (2011). Why service design is the next big thing in cultural innovation | Culture professionals network | The Guardian. The Guardian. Retrieved from https://www.theguardian.com/culture-professionals-network/culture-professionals-blog/2011/dec/08/service-design-next-big-thing

Rose, S., Spinks, N., & Canhoto, A. I. (2015). *Action research*. Retrieved from http://documents.rout-ledge-interactive.s3.amazonaws.com/9780415628129/Chapter 6 - Action research final\_edited.pdf

Sangiorgi, D., Fogg, H., Johnson, S., Maguire, G., Caron, A., & Vijayakumar, L. (2012). *Think Services - Supporting Manufacturing Companies in their Move Toward Services*. ServDes.2012 Conference Proceedings Co-Creating Services; *The 3rd Service Design and Service Innovation Conference*, 8-10 February: Espoo; Finland.

Sangiorgi, D., Lee, J., Sayar, D., Allen, D., & Frank, N. (n.d.). *Moving towards Service Dominant Logic in Manufacturing Sector: Development of a Tool for Inquiry.* 

Sangiorgi, D., Prendiville, A., Jung, J., & Yu, E. (2015). *Design for Service Innovation & Development Final Report.* 

Satzger, G. (2015). S*ervice Design Thinking*. Retrieved January 8, 2017, from http://www.whyservicedesignthinking.com/

Sommerfelt, U. (2016). *Your next management consultant is a designer.* Harvard Business Review, 1-3.

Stickdorn, M., & Schneider, J. (2010). This is service design thinking. (J. Wiley & S. Inc. Eds.).

Verganti, R. (2009). *Driven Innovation. Changing the Rules of Competition by Radically Innovating What Things Mean.* Harvard Business Press.

Von Stamm, B. (2004). Innovation - What's Design Got to Do with It? Design Management Review.

Designmatters | Where art & design education meets social change. Retrieved from http://designmattersatartcenter.org/

Student Design Association. Retrieved from http://www.thesda.ca/

*In-Company Training | ELISAVA*. Retrieved from http://www.elisava.net/ca/empreses/company-training

Collaboration | Designskolen Kolding. Retrieved from https://www.designskolenkolding.dk/en/collaboration

LinkedIn. (n.d.). Retrieved March 3, 2017, from https://www.linkedin.com/feed/

MAP / AlumniPolimi. (n.d.). Retrieved from http://cm.alumni.polimi.it/news/map%7B %7D0224%7B %7D1/

Meritocracy. (n.d.). Retrieved February 19, 2017, from https://meritocracy.is/it

SCAD.edu. Retrieved from http://www.scad.edu/

H-Farm. (n.d.). Retrieved March 5, 2017, from http://www.h-farm.com/scopri-nostri-master/

*In-Company Traininig.* (n.d.). Università Bocconi. Retrieved from https://www.unibocconi.it/wps/wcm/connect/Bocconi/SitoPubblico%7B\_%7DIT/Albero+di+navigazione/Home/Campus+e+Servizi/Servizi/Career+Service/Studenti+e+laureati/Orientarsi+al+lavoro/In-Company+Training/

In-Company Training in Sales, Management, Leadership, Customer Service and Digital Marketing with Professional Academy. Retrieved from http://www.professionalacademy.com/in-company-training

Flourishing Business Canvas. (n.d.).

Facebook search. (2016). Retrieved February 19, 2017, from https://www.facebook.com/search/top/?init=quick&q=3d printing&tas=0.6146032423712313

Design Matters. (n.d.). Retrieved March 9, 2017, from http://www.debbiemillman.com/designmatters/

DESIGNHUB.it. Retrieved from http://www.designhub.it/page/2

IN-COMPANY TRAINING - Università Bocconi Milano. Retrieved from https://www.unibocconi.it/wps/wcm/connect/Bocconi/SitoPubblico\_IT/Albero+di+navigazione/Home/Campus+e+Servizi/Servizi/Career+Service/Studenti+e+laureati/Orientarsi+al+lavoro/In-Company+Training/