Reverse mission report

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Introduction

The following report describes the activities carried out during the Reverse mission in Nord Brabant. The Reverse mission is a convention gathering 13 regions belonging to the Districts of Creativity network (www.districtsofcreativity.org), an association that aims at "fostering the exchange of best practices and experiences of stimulating creativity and innovation in business, culture and education".

The aim of the mission was to present to the participants examples of creativity, innovation and entrepreneurship in the Dutch region of Nord Brabant, but also to share the different perspectives over these themes. Since one of the main goals of the OIPEC project is the collection of best practices in innovative products and services development, the participation in this event has been a great opportunity for information collection, promotion and networking; thus, Politecnico di Milano asked to participate in the event in partnership with the Lombardy region.

Edoardo F. Colombo, fellow at the Dept. of Mechanical Engineering of Politecnico di Milano, has attended the activities from April 20 to April 22; the full program of the Reverse mission can be found at the webpage www.brabantsmartsolutions.com/reversemissionbrabant2016, and has been enclosed to this report.

Wednesday, April 20

10:35 am – Flight from Milan Malpensa to Amsterdam Schiphol.

4:30 pm circa – Visit to Hieronymus Bosch exhibition in s-hertogenbosch.

7 pm circa – Dinner and visit to "Sociallabel socioeconomics" centre (www.sociallabel.nl).

The centre aims at connecting people from different branches or social groups by proposing collaborative work activities that are both socially and environmentally sustainable. During the three-hour visit, the participants were introduced to two managers (Petra Janssen and Simone Kramer) who showed the products being created in the s-Hertogenbosch space, as for example the ">VEEG", a broom made from recycled bicycles frames. The discussion that followed provided interesting insights about how to manage multi-cultural collaborative activities and underlined the importance of a social perspective on new products development.

Thursday, April 21

8 am – Bus to Efteling, the biggest theme park in the Netherlands.

9 am circa – Visit to Efteling and meeting about Imagineering design of theme parks.

Olaf Vugt, responsible for the design of new attractions in the park, explained what makes a theme park so magical for children and adults alike: the experience and the memory that visitors make when they pay for visiting it. Through the combination of imagination and creative design ("imagineering"), it is possible to immerge people in a fantasy world that will be remembered for years.

1 pm - Light lunch and transfer to Tilburg

2 pm circa – Visit to the TextielMuseum and the TextielLab (www.textielmuseum.nl).

The TextielMuseum and the TextielLab are two sides of the same coin. The first one exhibits the rich tradition of Nord Brabant in textile making, while the second one researches new textile materials as well as new usages of textile materials, thus providing designers, artists and students with an open, collaborative space. The TextielLab not only features a state-of-the-art set of weaving machines, but it also comprises the careful reconstruction of a $20^{\rm th}$ century waiving plant, where traditional techniques can be studied. The participants were first welcomed by the museum director Errol van de Werdt, who explained the museum unique structure and mission; then, they were shown the museum laboratories. The museum and the labs are an example of how the past can build solid foundations for future products; moreover, they highlight how the involvement of "marquee" designers and collaborators can spur further collaborations.

4 pm circa – Meeting in the Railway zone of Tilburg and presentations of "Breda – City of Imagineers" (cityofimagineers.nl).

"Breda – City of Imagineers" (cityofimagineers.nl) is an association of creative start-ups in the Breda area. From the experience of these entrepreneurs, the most critical aspects of innovation is the growth of start-ups from tiny (5 or less employees) to medium size, as this process is needed to increase the resilience of the whole regional industry. In order to meet this goal, the association members help each other by promoting their activities, collaborating in large projects and sharing their experiences. These practices should be considered also in the set-up of the COILabs network during the development of OIPEC Work Package 3.

5 pm – Presentations by Imagineering academy students.

The presentations showed the work carried out by about 60 students from various European universities during the three days preceding the event. The District of Creativity association proposed the students ten societal challenges, such as mobility, agricultural sustainability, elderly care and waste reduction; students had to develop the theme with the help of local "coaches" and to propose a creative solution to the Reverse mission participants. The event highlighted how students can be a source of interesting ideas and innovation, but also how they need technical support for the actual development of these ideas.

Friday, April 22

9:00 am – Bus to Pivot Park (www.pivotpark.nl)

10 am circa - visit of Pivot Park (<u>www.pivotpark.nl</u>)

Pivot Park is an excellent example of open innovation centre providing nascent pharmaceutical start-ups with professional-standard machines, so that they can develop their bio-technical products. The park was born from the ashes of a previous private research centre; after the owner company closed the European R&D divisions, the employees, the company and the region developed together a new business plan for the structure.

The visitors were received firstly by Mirjam Mol, Director of the centre, who illustrated the history of the park and its open innovation model; then, Steven van Helden, manager of the screening centre, explained the typical pharmaceutical development process, the importance of the screening process and the role of the advanced machines in the Pivot park laboratories. The discussion with high-profile figures in an open innovation centre was very fruitful, and led to many of the reflections proposed in the next section.

3 pm circa – Informal meetings with Reverse Mission participants and discussion about innovation fostering practices

Conclusions

The participation to the Reverse mission in Nord Brabant was meant as an opportunity to collect innovation best practices and to evaluate and promote the OIPEC activities to international experts in the field. From these visits and discussions, some general suggestions for OIPEC project can be drawn:

- COILabs need not only strong vertical competences (for example in additive manufacturing and product development), but also horizontal competences to bind different disciplines together. Moreover, other competences must be integrated into the core OIPEC know-how, as for example innovation promotion, venture capital, IP management or accounting;
- Regional institutions' support is fundamental, as it is the involvement of other regional stakeholders;
- As for any other open innovation initiative, the management and protection of the IP must be addressed carefully;
- Today's problems are often complex and involve a multitude of sectors and knowledge areas;
- Each sector needs a special focus for example, pharmaceutical companies need long development times (from 10 to 15 years).

More specifically, the following actions are suggested:

- OIPEC trainers (Work Package 1) should be prepared on a wide range of topics concerning product/service innovation in order to handle the cocreation activities and business development;
- Regional agencies and associations should be contacted by OIPEC regional members in order to promote OIPEC activities and leverage their knowledge;

- COILab activities should be tailored for every partner, but at the same time some time should be dedicated to the creation of a network of actors (both academic and industrial) collaborating over complex issues;
- Partner enterprises should be willing to share their IP; clear IP protection rules must be detailed before the set up of COILabs;
- OIPEC should initially focus on a narrow, well-defined profile of stakeholders (i.e. companies), and then expand the partnerships to other sectors;
- OIPEC should attract some "marquee" partners, i.e. well-known and enthusiast enterprises that strongly believe in open innovation and are happy to publicize the results obtained.

This event can also become the basis for a more intense collaboration between the OIPEC research team in Politecnico di Milano and the institutions in Lombardy region, with benefits for both the project development and the enterprises in Lombardy.