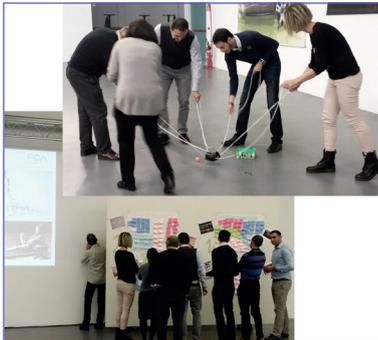


InnoLab – Innovating Future Mobility with talented students

A co-creation project to identify future visions and new concepts for mobility through the direct involvement of students participating in the Talent programmes at the Politecnico di Torino and the University of Torino

CO-CREATION



InnoLab – a case study focused on defining a feasible and viable vision for future mobility, conducted by specialists at CRF (the research & innovation centre of Fiat-Chrysler Automobiles) which, when run in mid-2016, was characterised by the direct involvement of 33 students from diverse faculties and disciplines including Mechanical, Electrical, Electronic, Aerospace Engineering, Management, Economics and Business Administration, Philosophy, Sociology and Psychology.

The students worked in different groups of 6-8, and the activities involved expressing their personal perspectives regarding different options and concepts aimed at addressing the issues facing society with respect to future mobility. The result of the activities was a series of future mobility scenarios that involved the assessment of critical factors including financial and economic considerations in addition to the technical perspective.

The activities were conducted over a one-week period.

Contact

C.R.F. S.C.p.A

Cristina Barberi, Innovation Process
Specialist
cristina.barberi@crf.it
+39 011 0042730

Process Main Stages

STAGE 1 – IDENTIFICATION OF TRENDS

In the first phase, experts and concept vehicle specialists from CRF collected and conveyed to the students a series of technology development forecasts and roadmaps in order to identify possible future trends and scenarios with respect to mobility and transportation by road.

STAGE 2 – TECHNICAL SEMINARS

In the second phase, the students were given the possibility to participate in technical seminars run by experts in FCA to provide information regarding specific technological solutions currently under development.

STAGE 3 – INNOLAB SESSIONS

The third phase related to the running of the InnoLab sessions which were conducted in distinct stages: Introduction, Ice-breaking & Warm-up, Initial vision creation, Vision dissemination, comparison & discussion, Vision development, Vision evaluation & assessment, Conclusions

STAGE 4 – FOLLOW-UP & FEEDBACK

The fourth and final phase was devoted to a follow-up, providing feedback to the students following an evaluation by the Innovation Director at CRF.

Main actors

- The Innovation Team of the Vehicles Research & Innovation Dept. at Centro Ricerche Fiat (CRF)
- Technical specialists from CRF
- Innovation Director at CRF (involved in the drawing of the final conclusions)
- Students on the Talent programme at the Politecnico di Torino (www.polito.it)
- Students on the Talent programme at the Università di Torino (www.unito.it)

Touchpoints & Bottlenecks

TOUCHPOINT 1 – WORKSHOPS AND FACE-TO-FACE MEETINGS

The InnoLab process which has been defined utilizes extensively workshops and face-to-face meetings as the key touchpoints. Previous experience has demonstrated that direct communication between participants is the most effective means, although effective communication also depends heavily on personal skills and experience.

TOUCHPOINT 2 – DIGITAL COMMUNICATION

Websites and other forms of communication are used exclusively within the information gathering phases, but during the InnoLab workshops Internet access is not permitted in order to encourage free-thinking by those involved.

Success Factors / Barriers

The principal success factors of InnoLab can be considered to fall into two distinct categories:

The first category concerns the personal and professional development of the students involved. In particular the participation in the InnoLab exercise provided the students with the opportunity to gain first-hand experience of working in the context of a Research Centre of an Industrial Company for several days, and for developing and applying a series of 'soft skills' such as working in multi-disciplinary teams and articulating and presenting the results of the activities to a wider audience. Furthermore, the students also gained access to and experience of working with various methods and tools, which have been developed and consolidated at CRF for the purpose of new concept generation and Innovation support including:

- Role Play, in which a group of participants performs a hypothetical service experience in front of a small audience of other participants
- Brainstorming, which is a group problem-solving technique that involves gathering spontaneously contributed ideas from all members of the group to find a conclusion for a specific problem, which is particularly useful for generating many initial ideas to choose from for further development.

The second category regards the positive contribution received by CRF in terms of both helping to appraise the suitability of individual students with respect to the professional working environment and from the direct interaction with the students that helped to provide new points of view and specific opinions regarding the relatively familiar discussion on future mobility. Indeed the aim was to conduct "co-creation" by involving the students themselves as current and future users of mobility. In this context, the students were able to provide a new and potentially completely different perspective on the development of mobility solutions with respect to more experienced vehicle designers of FCA, a number of whom were also involved in the process to provide answers to the students, particularly as regards specific technical issues, if and when requested.

The main barrier, which was encountered, was related to the difficulty to be able to come up with original ideas and concepts in an age in which everyone is effectively bombarded with information and opinions. Consequently it will be necessary to develop and refine the tools to address and overcome this hurdle in future editions of InnoLab.

Conclusion

Naturally, the quality of the result is directly dependent on the abilities, skills and level of interest and motivation of the participants, in this case students on the Talent programmes at the Politecnico and University of Torino. Through the process, it is of fundamental importance for those running InnoLab to try to keep the levels of motivation and interest as high as possible by continually setting new assignments. The direct involvement also of key specialists and the Innovation Director can also help to provide motivation.

In general it is essential to find an appropriate equilibrium between providing the participants with clear instructions and guidance on one hand, while encouraging and supporting free and inventive thinking on the other.

DO

- Keep the levels of motivation and interest as high as possible
- Direct involvement also of key specialists
- Provide guidance and support free thinking

DON'T

- Avoid anything which could undermine the students' motivation.

