Innovation Lab: How to Generate Patent in One Day

A way to bring TRIZ in Italian SMEs

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Summary

I. Warrant Innovation Lab

II. TRIZ history in WIL

III. The Innovation Lab service for SMEs
Warrant Innovation Lab

• **Private company** operating in Italy as **Innovation Consultancy** firm

• WIL works mainly for **SMEs**

• WIL is the hub of a **network of accademical and professional partners** that offer knowledge, technology and proficiency

From the generation of the idea, to its protection, through planning and realization.

Digital technologies promotion for all aspects and business sectors where it is strategic.
Warrant Innovation Lab team

Multidisciplinary team

• 3 Management Engineers
• 2 IT Engineers
• 1 Biotechnology Scientist
• 1 Chemical Engineer
• 1 Civil Engineer
• 1 Space Engineer

But no TRIZ expert in WIL

• Partnership with University of Bergamo when there are challenging problems
• Development of the Innovation Lab formula

I’m not a TRIZ expert, I’m still a trainee!

PhD candidate in Economics and Management of Technology

Specialist in patent to support Problem Solving (made with TRIZ)
TRIZ history in WIL

2009
• WIL hears about TRIZ in University of Bergamo

2011
• TRIZ introductive course for 5 employees of WIL

2015
• WIL funds a PhD program at University of Bergamo

2016
• Design of a new service to promote TRIZ in Italian SMEs

2017
• Development of the Innovation Lab Service with University of Bergamo

2018
• Innovation Lab service test with 5 SMEs
The Innovation Lab service

The most fascinating aspect is the formula proposed: a 1-day innovation activity to reach patentable solutions

SMEs like this formula because:

- TRIZ perceived as a method that requires too much time to become efficient for day-by-day business
- SMEs do not want to learn a new method, they need solutions
- Italian SMEs have low patent culture. They patent before the market launch

| Innovation Lab cost 1-day of few people from firm | Innovation Lab aims to reach conceptual solutions ready to patent | Patents are explained as a way to protect the solution before developing it |
The innovation Lab service process

<table>
<thead>
<tr>
<th>Customer care &amp; back office</th>
<th>Innovation Lab service presentation and offering</th>
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<tbody>
<tr>
<td>Keeping in touch with customers to collect innovation needs</td>
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<tr>
<th>Back-office activity to retrieve knowledge about the problem and available solutions</th>
<th>First technical meeting (2h) to understand the background of problem</th>
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<tr>
<td>Crushing down of the constraints and building of new points of view</td>
<td>Re-formulation of the problem as functional alternatives</td>
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<tr>
<th>Technical report with description and sketches</th>
<th>Choice of most interesting conceptual solutions</th>
<th>First formalization of conceptual solutions</th>
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<tbody>
<tr>
<td>1-day service</td>
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TRIZ tools behind Innovatino Lab

Explicit usage with customer
- Matrix of requirements
- Modified ENV model
- Film maker
- SLP

Implicit usage by the team
- Contraddictions
- Knowledge retrieval
Innovation Lab features

• It does not explain TRIZ, it aims to demonstrate that it works
• It is an indirect way to promote TRIZ through solutions
• The Innovation Lab team is led by a TRIZ expert and 3 TRIZ trainees
• Working in parallel to reduce time
• Direct involvement of customer (R&D, marketing, decision makers)
• Patenting is not mandatory. Sometimes the conceptual solutions need testing and development, but they are ‘patent-ready’
• Validation of solutions is done in next days
Results from a case study
Conclusions

• The service is currently in evolution
• The testing in 5 cases given positive results
• The service is a sort of ‘trojan horse’ to diffuse TRIZ
• The formula of service allows to fidelize customer in innovation activity

• The service is not scalable. It depends from TRIZ expert
• It needs development to increase scalability
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Thank you for your time

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