

Solving Technological Problems at E.C.I. Telecom

ECI Telecom and its subsidiaries provide advanced communication solutions for service providers and communication companies around the world. Throughout the years of its existence ECI has been a pioneer in the development and implementation of new technologies, including solutions in the field of optical communications, sound compression, SDH, DHL, and so on. The major company sites are found in Petah Tiqwa, Kanot, Kiryat Shemona, and Ofakim. In the months of April-May 2003 we held an innovative process in ECI Telecom that aimed at increasing the quality in the existing production and integration lines. People from the different divisions (see description below¹) and from the entire supply chain in ECI participated in the process. The head technologist, engineering manager, logistics manager, and instruction manager in ECI participated in the preliminary characterization of the process and its goals. In the identification of the needs, the participants said in the characterization that: “We think and solve problems in a standard manner and we would like to reach innovative solutions, places where we have not reached with the existing tools.” (sic.)

Definition of the Topics

At the start of the process it was determined that the activity would aspire to improve levels of quality and **outputs** in the real topics and/or real problems that had not been solved till then. In addition, it was defined that every topic that was chosen for treatment would need to meet three criteria:



Typical production line

- The topic requires treatment and has not yet been addressed or solved, for whatever reasons.
- The topic is a process issue in micro and not macro.
- The topic is a measurable issue that will allow the process’s degree of influence to be evaluated.

To increase the workshop’s chances of success, a number of basic rules were determined:

1. Participants from the entire supply chain were selected to obtain a response from all areas.
2. Real problems were chosen for treatment in the process framework.

¹ The company’s units that sent representatives: engineering, technology, acquisitions, information systems, quality control, production and integration managers.

The participants undertook the program, which is customary for us, and learned and practiced implementations of innovative thinking for the resolution of technological problems. The next and essential stage – the stage of coping with the problems chosen for treatment by the steering team – had two significant products.

1. Change of Perspective

The definition of the problems treated, as is the nature of many technological problems, was vague (or as we put it, ‘problem cloud’) and required the performance of a re-analysis of the information describing every problem. The analysis process (an integral part of the SCMM procedure) of the issues, familiar to the participants, led to the appearance of a number of clear foci that enables effective coping during implementation of the tool of innovative thinking.

2. Characterization of Solutions

The participants, who come, as aforementioned, from different parts of ECI, outlined 16 solutions that were defined as “innovative” following the different and surprising format that characterized the new solutions when they went to address familiar problems. In addition to the high degree of applicability of the proposals raised in the process, the participants reported a significant contribution of the tools learned to the coping in their specific field of occupation and in the change of thinking.

Rami Malka, the manager of instruction at ECI and the person responsible for implementating the products of the process, added: *“I want to thank the participants and the instructor of the process – Mr. Nir Ben Lavi – expert in his field who presented a new and high standard of professionalism, seriousness, and quality of customer service. The participants ranked the quality of the process with a score of 99 (out of 100)”*.