

**CENTER FOR
QUALITY**



**UNIVERSITY OF MONTENEGRO
FACULTY OF MECHANICAL ENGINEERING**

7th International Conference

ICQME²⁰₁₂

(Quality, Management, Environment, Education, Engineering)

Proceedings



**Tivat, Montenegro
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Faculty of Mechanical Engineering**

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A RESILIENCE ASSESSMENT OF THE PROFILE AND STRUCTURE OF A NEW TECHNOLOGY PARK

Abstract:

A high technology park allows the possibility for the application of technology and science transfer for the improvement of the economy. This paper highlights the fundamental attributes of sustainability, vulnerability and resilience concepts, and identifies the conceptual linkages between them through the use of a generic systems approach. The contribution of this paper is in the following areas: [1] application of the general concept of resilience in the design of a technology park, [2] determination of a technology park's initial resilience assessment level, [3] assessment of the environment effects on the projected level of resilience of the technology park.

Keywords: *Resilience assessment, profile, structure, Technology Park*

1. INTRODUCTION

A technology Park (TP) is a modern solution for rapid and broad technology transfer. It is an organizational system, designed for the purpose of effective knowledge transfer and for the support of innovative potential in a region. In the process of technological park designing, the voice of the customer, the value chain, organizations, industry, secondary research, experts, a request for Local Economic Development and a Strategy of Technology Development at a state level have to be included. Each of them is connected with risk and has its own sustainability and expected vulnerability. Designing of a technology park is a very comprehensive project associated with risks [1, 2] and inter-organizational knowledge transfer relation [3]. But, there is not information about resilience of technology parks in theory and praxis. The basic idea of a TP is to gather and integrate innovative resources for the development of a region. Regardless of the justification of this approach, during the design phase of a TP and its functionality, many difficulties must be coped, with ranging from operational to strategic.

A high technology park allows the possibility for the application of technology and science transfer for the purpose of improving the economy. The designing of a TP is covered by appropriate methodology, including a SWOT analysis. Results are an appropriate profile and structure of technology parks. In this procedure special attention is devoted to the sustainability, vulnerability and resilience of a designed TP.