



## **ACADEMIC YEAR 2012 – 2013**

### **TITLE OF DIPLOMA THESIS:**

Evaluation of Organizational Health Using the Entropy Theory

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### **ABSTRACT**

The recent cases of false measurement of the real conditions of an organization lead to a chain reaction in the global economy (Lehmann Brothers, Enron, Delta Airlines etc.). From those examples, it is easily understood that there is a need for a new methodology in order to measure with a scientific way that will reflect the real condition of an organization and not only a small positive part of it. Although there are several methodologies today that measure the condition of an organization (organizational performance and economic sustainability are the most frequent among many others), those recent bankrupts and the analysis of modern research, are pointing towards a gap in recent methodologies. This thesis is trying to bridge the gap and triggering a new path of scientific research. For the needs of the current thesis, there have been an extend research on recent scientific papers and theses. During the research, many scientific fields were bridged in order to create a holistic methodology that would be able to cover this multifaceted problem. Through the research, critical information about current methodologies was collected, covering factors that affect an organization as well as ways of measuring them. Meanwhile, some weaknesses of the current methodologies were confronted. Next step was a proposal for a new methodology that combined strong points of existing methodologies and finding ways to overcome previous weaknesses. For the needs of the new methodology, the meaning of organization health was borrowed from the medical fields and the theory of entropy was borrowed from the thermodynamics fields, as a measuring tool for the organization health factors. The main findings of the current thesis are the suggested methodology for measuring organizational health and the mathematic formulation of the entropy theory, after the transportation to the organizational fields. Finally, there are many findings that lead to further research. The suggested methodology claims to bypass past weaknesses and needs to be tested. Meanwhile, the many scientific fields that contribute to the final outcome require further research in order to examine the compatibility with the organizational field.

### **KEYWORDS**

Organizational Health, Entropy, Organizational Performance, Organizational Evaluation, Evaluation Methodology of Factors

