

7th International Conference on Building Resilience; Using scientific knowledge to inform policy and practice in disaster risk reduction, ICBR2017, 27-29 November 2017, Bangkok, Thailand

Neuro Multiple Criteria Analysis System for University-Industry Partnerships

A. Kaklauskas^{a,*}

^a*Vilnius Gediminas Technical University, Vilnius, Lithuania*

Abstract

The EU RTD stresses the Europe 2020 objective that it “aims to support the development of a strong and sustainable industrial base able to innovate and compete globally”. University-industry partnerships should be sustained for inspiring up-to-date RTD, and industry-driven antecedences should be reinforced. The positioning by these authors had a solid accent on university-industry partnerships over the entire course of the ASCENT project to increase societal resilience to disasters. Collaboration appointments can appear in numerous forms and dimensions (career fairs, business advisors and affiliates, placements, conferences and meetings, project and university initiative support, program improvement, scholar fellowships, joint life cycle collaboration, RTD projects and product/service development). The forms and stages of partnership will fluctuate depending on the micro-, meso- and macro-levels of the environment. A founder of behavioral economics, Nobel Prize laureate Daniel Kahneman, asserts that two categories describe our thinking: fast thinking (first system) and slow thinking (second system). The foundation of the first system consists of emotions, impulses and exaggerated optimism. The first system does not require any great efforts; it operates practically automatically. Meanwhile the second thinking system is slow and analytical with an ability to control behavior and thoughts. Based on this idea, the author of this article developed the Neuro Multiple Criteria Analysis System for University-Industry Partnerships.

© 2018 The Authors. Published by Elsevier Ltd.

Peer-review under responsibility of the scientific committee of the 7th International Conference on Building Resilience.

Keywords: University-Industry Partnerships, Multiple Criteria Analysis, Affective Computing, Neuro Decision Matrix

* Corresponding author. Tel.: +370-5-274-5234

E-mail address: arturas.kaklauskas@vgtu.lt

1. Introduction

Lately these authors have been consistently making more efforts at rationalizing university-industry partnerships by considering the emotions and motivations of stakeholders. Positive as well negative emotions and motivations have an approximately equal effect on the efficiency of a university-industry partnership. Numerous scientists and practitioners have studied such a relation [1-9]. A brief analysis of this follows.

Scholars and practitioners [3-5, 8, 9] have analyzed the university-industry partnership through an emotional prism. For example, in the opinion held by [5], the best support for the requirements involved in the knowledge co-creation process at the multi-user Co-creation Centre for university-industry collaboration entails the place where individuals share feelings, emotions, experiences and mental models and the place where the knowledge-creation process begins. The main [5] findings are that the knowledge co-creation process requirements for university-industry collaboration at a Co-creation Centre are best where individuals share feelings, emotions and experiences. [10] compared the rankings of Turkish Universities obtained by the Scientific and Technological Research Council of Turkey's (TUBITAK) Entrepreneur and Innovative University Index (EIUI) with the rankings obtained by an analysis of the sentiments expressed in the social media messages by the related university's students, including graduate students. Sentiment analysis is the field of study that analyzes people's opinions, sentiments, attitudes and emotions on products, services, organizations, individuals, issues, events and topics. Sentiment analysis focuses on opinions expressing or implying positive or negative sentiments. [10] performed a sentiment analysis on the approximately 1,353,803 tweets of 57,321 followers from 50 universities of ranking interest thereby obtaining a new ranking of them. Later [10] conducted statistical tests on the compatibility of these two university rankings.

The university-industry partnership has also been deliberated from the perspectives of different emotions (trust, happiness and the like). [11] developed the wheel of emotions suggesting eight primary emotions grouped on a positive or negative basis: joy versus sadness, anger versus fear, trust versus disgust and surprise versus anticipation. [12] investigate how relational mechanisms facilitate trust formation in university-industry research collaborations (UICs) in three countries and contribute to the understanding of international similarities and differences in UICs by considering institutional factors, specifically, the strength and maturity of UICs in each country. The analysis of survey data from 618 recent UICs in the US, Japan and South Korea by [12] identifies the activities of innovation champions as serving like a critical trust building mechanism between firms and universities complementing initial trust formation through strength of contacts, partner reputation and contractual safeguards. [12] find that partner reputation and champion behavior are more important for trust formation in South Korea than in the U.S. and Japan indicating that, in "emerging UIC countries" where most firms and universities have little collaboration experience, reputation and the leadership by innovation champions are more important for trust formation in UICs than in "advanced UIC countries" with strong and mature UIC networks. The findings of [12] suggest, from a public policy perspective, that networks between firms and universities should be generally strengthened and collaboration partners should be provided with effective contractual safeguards to enhance trust formation among UICs. The clinical placement learning environment is a critical component of nursing education where Australian nursing students spend a minimum of 800 hours. Thus identifying components of successful clinical placements for undergraduate nursing students is therefore paramount. An assessment of nursing students' views of the learning environment during clinical placement with an emphasis on the pedagogical atmosphere reveals the importance of the leadership style of the ward manager and premises of nursing in the unit or ward. The study used Clinical Learning Environment, Supervision and a nursing teacher questionnaire to examine the perceptions of 150 final year undergraduate students in the clinical placement learning environment. Student nurses value a welcoming workplace, where staff and educators are happy to help and have a positive attitude to student presence at the wards [2]. [7] examine the dynamic nature of university-industry linkages (UIL). Thirty in-depth interviews conducted in Australia and Germany/the Netherlands provide evidence of the different phases through which UILs evolve and their respective measures of success. Communication, understanding, trust and people are universal drivers, yet managers must consider the variations in the nature of these factors to ensure successful UILs [7]. [7] study equips managers involved in technology transfer, innovation and commercialization with critical insights into developing effective relationships.

As stated by [13], motivation is the reason for people's actions, desires and needs and it is their direction for behavior, or what causes people to want to repeat a behavior. In line with [14], a motive is what prompts a person to act in a certain way, or at least develop an inclination for specific behavior. Emotion is often intertwined with mood,

Download English Version:

<https://daneshyari.com/en/article/7225857>

Download Persian Version:

<https://daneshyari.com/article/7225857>

[Daneshyari.com](https://daneshyari.com)