
Determine the severity of the effect and the effectiveness and Prioritizing Factors Affecting Intellectual Capital by hybrid Fuzzy DEMATEL and Fuzzy Analysis Network Techniques in ANZALI Free Zone

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In order to increase competitiveness in the domestic and global zones, innovation is needed to provide services and business on the basis of new economic requirements, and the intellectual capital of any organization is the foundation of these innovations. The acceptance of this vision by the managers of the Anzali Commercial and industrial Free Zone Organization and its expression in meetings and seminars led to the recognition of intellectual capital as one of the organizational goals. Considering the identification of the factors affecting intellectual capital in previous studies, this research, in order to determine the goals and planning of the recognition and development of intellectual capital, according to experts the Anzali Industrial and Commercial Zone, has chosen and prioritized the components of capital Conceptualization is based on the combination of multi-criteria decision-making techniques (Domestic and network analysis process). The statistical population of this study is 16 experts (senior managers) of Anzali Free Zone Organization and sampling has not been done. For collecting data, specific questionnaires for wastewater analysis and network analysis have been used for paired comparisons of effective measures on intellectual capital. By hybrid the DEMATEL and ANP (The product of the total effect matrix of the DEMATEL and the unweighted super-matrix of the ANP), the final weights of the criteria and sub-criteria were determined and priority was given to the factors affecting intellectual capital. The output of the hybrid technique showed that among the three main criteria affecting intellectual capital, human capital in the first priority, organizational capital in the second priority, and

innovation capital in the third priority. In the below-effective measures on human capital, the priority ranking is: staff attitudes, employee creativity, and employee competence. In the sub-criteria on human capital criterion, the priority ranking is: staff attitudes, employee creativity, and employee competence. In the sub criteria of structural capital priority is the following: operation process, organizational culture and organizational structure of equal priority, information system and organizational learning. The order of priority in the sub criteria of innovation capital is: innovation achievements, innovation culture and innovation mechanism.

Keywords : Intellectual Capital, Human Capital, Structural Capital, Innovation Capital, Fuzzy Decision Making Trial and Evaluation Laboratory Technique, Fuzzy Network Analysis Process.

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