



Can Digital Transformation Be Considered a Component of Intellectual Capital?

Ayşe Aslı YILMAZ¹, Şule TUZLUKAYA² and Erdem KIRKBEŞOĞLU^{3,*}

¹Atılım University, Turkey

² Atılım University, Associate Professor, Turkey

³Başkent University, Professor, Turkey

Abstract

In recent years, the organization literature points to clues that digital transformation competencies in organizations are also components of intellectual capital. In this study, based on the explanatory power of social networks, the purpose of the research is to analyse the interaction between the airport's digital transformation criteria and the intellectual capital components of aviation stakeholders and to determine the most critical and precarious components considered as starting point application in the process of digital transformation. Therefore, we determine our research question as "How precisely do the digital transformation criteria increase the value of intellectual capital?"

In order to answer the research question, structured interviews were conducted with the senior managers of the subsidiaries of TAV Holding Company, one of the world's leading airport operators. The obtained information enabled the creation of interaction maps with the social network analysis method. First of all, the results of the interviews and surveys conducted with TAV Esenboga Head Office and then with the TAV Holding Subsidiaries were analysed in Python NetworkX. The study is planned with a matrix consisting of 37 digital transformation criteria in the row under 6 main headings and 35 intellectual capital components under 3 main headings in the columns, designed with a network analysis setup. The findings show that it is seen that the digital transformation in the aviation sector in the transition to Industry 5.0 added too much value to the intellectual capital of the airports that it became a component of the intellectual capital.

Keywords: organizations, management, digitalization, aviation