**NETWORK ANALYSIS FOR INNOVATION ECOSYSTEM OF SAMSUN**

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**ABSTRACT**

This research is about to explain the features of Samsun innovation ecosystem network through social network analysis. The purpose is to draft Samsun Innovation Ecosystem Network Map and its representation with network mapping. The main question is what are the features of Samsun innovation ecosystem network and/or how is the Samsun innovation ecosystem network explained? This research is the first, but not last, academic study which combines theoretical and practical perspectives on innovation ecosystem network analysis in provincial level in Turkey. Having reviewed the previous studies and theoretical background from the researchers such as Freeman C. and Luc S., Curley M.G., Moore C.F., Gomes L.A., Dedehayir O., Burt R.S. and Barabasi A.L. for the concept of Innovation Network and Ecosystem Analysis. As a methodology, specified geographical coverage as Samsun, population of reference as 20 among 66 regional actors, selected snowball technique as a data collection method because of the limited time and global pandemic. This research was prepared under the limitations of geographical coverage of Samsun, tool of Gephi for network analysis and exclusion of private sector companies from the sample group. The findings of this study are that 1. Samsun ecosystem has within the scope of co-event for R&D and innovation, with 288 links. The item that follows the co-event is the cooperation protocol, which is the intention to work together, for R&D and innovation, as of 2020, a total of 167 links for cooperation-based protocols, 97 links for project partnerships, 75 links for services, 21 links for providing financial support and 13 links for clustering in the ecosystem, 2. In the ecosystem, there are a total of 75 links regarding services provided by institutions for R&D and innovation. There are, as a service provider in the ecosystem, 15 institutions for project consultancy services, 9 institutions for commercialisation services, 6 institutions for incubation services, 5 institutions for incorporation services, 6 institutions for IPR services, 13 institutions for entrepreneurship services, 8 institutions for internationalisation services, 5 institutions for funding services, 8 institutions for education & training services. There is not any service provider for venture capital services, 3. Ondokuz Mayis University ranks first with 170 relationships. OKA ranks second with 132 relations, OMU TTO ranks third with 97 relations, SAMU and SAMU TTO rank fourth with 73 relations, STSO ranks fifth with 65 relations and SAMSUN TEKNOPARK ranks sixth with 60 relations. As there are 41 institutions have lower than 10 links, SASBAS and Bafra TDI Organised Industrial Zone are seen isolated from the ecosystem as not having any relation, 4.OMU has become the first in the relationship concentration by connecting with 32 co-events, 6 regional or international supported projects, 79 cooperation protocols and 1 financial support and 1 clustering in the ecosystem. For the result-oriented performance, there is a need for a stronger university-industry cooperation model on a city scale so, this cooperation will both support the university and contribute to the holistic development of the province in the medium and long term.

**Keywords:** Innovation, Innovation Ecosystem, Social Network Analysis, Network Mapping, Samsun

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