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## **Regional dispersion of cooperation activities as success factor of innovation oriented SME**

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### **Abstract**

In this paper, we analyze the relationships between different types of innovation and collaboration, given the varying geographical distance of the latter. The study is based on the data of the research project “KompNet 2011 – Factors determining the success of regional innovation networks”, which examines the innovation activities of small and medium-sized enterprises (SME) in and closely around Jena (Thuringia).

The aim of this paper is to explore to what extent spatial reach of collaboration linkages determines innovation orientation and innovative behavior. That means: Innovation performance could be positively related to (a) to a high intensity of local collaboration, (b) the intensity of international collaboration or (c) neither regional nor (inter)national collaborations.

In a first step we summarize the relevant literature which comprises aspects of our central subject under investigation. We additionally discuss the necessity of keeping in mind several control variables for theoretical and empirical reasons. In the following we present descriptive analyses relating to the regional reach of collaboration in general, the impact of collaboration on innovation and the links between the regional reach of cooperation and different forms of innovation, i.e. product, process, marketing and organizational innovation. In a final step we discuss the results of several regression models.

We observe that there is no significant influence of the geographical variables on the innovative performance of SME. Therefore our findings suggest that innovative firms rely on collaboration partners at a variety of spatial distances. The results also show a significant and positive influence of the intensity of competition on the innovativeness of firms in all models. Furthermore product- and process innovations are created by firms with intensive cooperative activities to scientific institutions, while a wide variety of cooperation partners and a strong focus on quality leadership turns out to be important for the development of marketing- and organizational innovations.

**JEL classification:** D85; L10; O31; R12

**Key words:** Cooperation, Geographical reach, Innovation, Intensity of competition, Marketing innovation, Organizational innovation, Process innovation, Product innovation, Quality leadership, Regional dispersion, SME, Spatial distance

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