

# SELF-ORGANIZING PROCESSES IN BUILDING ENTREPRENEURIAL NETWORKS: A THEORETICAL AND EMPIRICAL INVESTIGATION

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This paper has been published as 'Self-organizing Processes in Building Entrepreneurial Networks: A Theoretical and Empirical Investigation'. *Human Systems Management*. 20: 209-222.

**Abstract:** Self-organization is a property of social systems, and its recognition can give a remarkable contribution to the theory of entrepreneurship and to the analysis of inter-organizational networks. While literature on the classification of inter-firm networks and on their (dis)advantages is relatively abundant, there is much less on the processes of their formation and development. Since the convenience of building inter-firm networks is often uncertain and ambiguous, it involves social-psychological aspects and is based on personal relationships. This is particularly true in the case of small business networks, where the small firm size makes firm networks coincide with entrepreneurial networks. This characteristic can be extended to industrial districts, which are systems emerging from the interplay between small business networks. Industrial districts are weakly hierarchical organizations, which present the typical dual nature of social systems: the systemic nature, which is manifested more at the unity level, considering the district as a whole, and the subjective behavior of its members, which can play a crucial role either in triggering the district or in its evolutionary patterns. Such a double nature becomes a powerful engine of knowledge creation/transfer when organizations are recursive and self-organizing, and when the emerging values promote cooperation and trust. These coevolutionary, recursive and self-organizing aspects have been synthesized in Nonaka's concept of 'ba'. The cases discussed here deal with recursive processes in the formation of entrepreneurial networks in the biomedical district and in the formation of the district itself, which are seen as partially self-organizing processes. In the perspective considering knowledge as embodied in human beings and created by their social interactions, this paper concerns selforganizing and knowledge-creating processes at district and network levels.

**Keywords:** biomedical industry, entrepreneurial networks, identification, industrial district, knowledge creation, recursivity, self-organization.