
Decentralisation and networks

Petra Moog*

Business Succession, Entrepreneurship and Family Business,
University of Siegen,
Hoelderlinstr, 3, 57068, Siegen, Germany
E-mail: p.moog@uni-siegen.de
*Corresponding author

Arndt Werner

Research School of Business and Economics (RSBE),
University of Siegen,
Am Eichenhang 50, 57068 Siegen, Germany
E-mail: Arndt.Werner@uni-siegen.de

Entrepreneurship, networks and decentralisation are three interdisciplinary research fields ideally and equally suited for inquiry into the elements of business administration, economics, and business information systems. They are also capable of integrating the contributions of each of these elements. Thus, this special issue aims to provide an overview of recent scientific contributions and tendencies in network research and decentralisation in the context of entrepreneurship.

Entrepreneurship involves identifying and exploiting entrepreneurial opportunities as well as creating value. To do so, it is often necessary to work in or with networks and to use and develop social capital. Moreover, it is sometimes necessary to act in decentralised structures or to overcome these structures to establish and manage a new company or a small or medium sized enterprise successfully. This calls for an integration of entrepreneurial and organisational thinking.

We explore this combination in several important organisational domains such as external and internal networks and alliances, organisational learning, resources (financial, social and human capital), and internationalisation, to name only a handful of topics.

Following these ideas, research in this special issue examines both traditional (e.g., human and social capital theory and internationalisation theory) and new (e.g., cloud computing, collective action theory) theories. The contributions in this issue also integrate, extend, and test theory and research from the entrepreneurship field, economics, business administration and business information systems using various methods, such as model building, empirical testing and case studies. Thus, we hope the research presented here provides a basis for future research on entrepreneurship, networks and decentralisation.

The six papers published here are the results of presentations and discussions at the 1st Interdisciplinary Workshop of the Graduate Research School Business and Economics (RSBE) on, 'Decentralisation and networks', held at the University of Siegen on 24th and 25th November 2011. During the workshop, scientific discussions and the exchange of ideas among researchers and other academic staff were explicitly

encouraged. Out of 28 presentations, the review process finally yielded six papers for the special issue. The reviewers used three criteria in the first cut:

- 1 Is the paper currently or potentially publishable on criteria used by *IJEV*?
- 2 Does the paper meet the additional criterion of contribution to the theme of the special issue in relation to entrepreneurship or business venturing?
- 3 Could the paper reach its potential in time to meet the publication schedule for the special issue?

Those papers fulfilling all three criteria were selected for the special issue.

The first five papers examine networks, particularly social capital building, network organisation and their usage in overcoming problems relating to entrepreneurial activities and in creating successful solutions in an entrepreneurial or SME context. All six papers deal – implicitly or explicitly – with issues of decentralisation from different theoretical points of view. The first two papers as well as the last paper work with quantitative data to analyse and test theoretical approaches such as social capital theory, internationalisation theories, and entrepreneurial financing (theory). The third and fourth papers focus on model building in business informatics in generating valuable solutions for the interaction/networking/cooperation of SMEs. The fifth paper develops a theoretical framework answering the question why a specific group of individuals could become entrepreneurs. Thus, in the first two papers the focus is more on social capital or network approach, in the third and fourth papers the business informatics approach is more in the foreground and finally in the last two papers internationalisation is at the core of the analysis.

Christiana Weber and Jan Kratzer, in their paper, ‘Social entrepreneurship, social networks and social value creation: a quantitative analysis among social entrepreneurs’, develop a view of social enterprises creating social and financial value, depending on the social enterprises’ underlying business model and their networks/social capital. Using an international dataset of 390 social enterprises, collected by the authors, this study empirically investigates which impact the different structural dimensions of the social entrepreneurs’ social network have on the social as well as financial value creation. The main findings indicate that social networks mobilised through network quantity, network widespread and network diversity contribute to the social enterprises’ social and financial success. In addition, the paper demonstrates that the underlying business models of social entrepreneurs also determine the achievement of social and financial success. Hence, this investigation is another step towards a coherent theoretical conceptualisation of the phenomenon of social entrepreneurship and decentralised or centralised network effects.

The next paper by Jochen Christian Werth and Patrick Boert, ‘Co-investment networks of business angels and the performance of their start-up investments’, examines the effects of business angel networks. The authors build on the existing venture capital literature by investigating the nature of the performance effects of business angel networks using a comprehensive dataset of 1,746 US high technology start-ups. The paper extends the literature on the role of networks as it identifies three spheres of influence: sourcing high-quality investment opportunities, nurturing companies by drawing from a better pool of resources, and improved strategies in attracting venture capital investors in the later stages. Key results identified that start-ups supported by better-connected angel investors are more likely to receive subsequent funding by venture capitalists, and that business angels more often exit successfully. Thereby, angel investors

seem to rely on their direct contacts, whereas their network position and possibility to act as information brokers plays a far smaller role. These findings manifest the important role of networks in entrepreneurial finance.

The next two papers are conceptional contributions on the role and modelling of collaborative software to support the network activities of SMEs. Désirée I. Christofzik and Christian Reuter's paper 'The aggregation of information qualities in collaborative software' illustrates that inter-organisational collaborative software can support different participants (i.e., SMEs) in merging decentralised information to encourage entrepreneurial opportunities, generate resources or solve a problem. The authors elaborate, that designing such a system requires a profound understanding of the underlying processes, especially of how the aggregate level of information is assembled and how individual contributions can be enhanced through the implementation of such an infrastructure. To identify appropriate scenarios, the authors have conducted a qualitative empirical study proposing initial ideas illustrating that it is possible to transfer these case implications to other forms of collaborative systems between organisations or companies as is already a common case in small- and medium-sized enterprises (SMEs) who wish to foster competitiveness or to overcome typical limitations of start-ups. The authors discuss different composition functions (best-shot, weakest-link, weaker-link, and summation) using a generalised CES function in order to provide an understanding of the underlying consolidation process. They also derive practical implications that are connected with the assumptions about the production process transferable to SME collaborations.

The paper by Novica Zarvić, Benedikt Martens, Oliver Thomas and Frank Teuteberg, 'Supporting entrepreneurial venturing of SMEs in collaborative cloud computing environments: a dependency-driven construction of scenario maps', argues in the same way. Cloud computing is a relatively new computing paradigm and opens up possibilities to build new inter-organisational business configurations. Young as well as small- and medium enterprises (SMEs) often neglect the opportunities and potential that inter-organisational collaboration in the context of cloud computing can offer. Thus, the authors follow a construction-oriented research approach and design scenario maps as conceptual models, serving as a reference catalogue of all conceivable collaboration scenarios and participating actors in cloud computing environments. The design science research artefacts presented in this paper are useful for decision makers and allow SMEs and start-ups to extract and analyse alternative inter-organisational collaboration scenarios. Again, the impact of technology on network building and effective usage of networks is analysed.

The last two papers examine international aspects in the context of networks, decentralisation and entrepreneurship. Elizabeth C. Burer, Susanne Schlepphorst, Arndt Werner and Petra Moog, in their paper 'Repatriates as entrepreneurs? – A theoretical analysis', raise the question as to whether the international decentralisation of companies and the assignment of expatriates (who upon return become repatriates) may foster entrepreneurship. The paper aims to theoretically determine if repatriates are, by virtue of their international work experiences, especially suitable candidates for self-employment. To address this research question, the Jack-of-all trades view and the human and social capital theories are employed. To investigate this prospect, the opportunity recognition and development approach is applied because the realisation and exploitation of market opportunities is a precondition for venturing into self-employment. The above named theories are also employed to compare repatriates and start-up

entrepreneurs as they have been found to facilitate the identification and exploitation of ideas. Thus, this theoretical paper deals with the possible effects of international decentralisation of companies on employees, and particularly repatriates. It is argued not only on the grounds that international assignments enhance human and social capital endowments but also on the grounds that inadequate reintegration practices in companies may motivate the need for repatriates to explore new ventures.

In the final paper of this special issue, 'International market diversification of innovative European SMEs – what role do various innovation strategies play?', Christian Hauser, Jens Hogenacker, and Kerstin Wagner investigate in an empirical study the impact of a broad or narrow innovation strategy on the degree of internationalisation in SMEs. The authors measure internationalisation as a degree of centralisation or decentralisation with regards to the closeness of the SME to the home country. Analysing the link between various types of innovation activities and the export scope, the authors use data obtained from the European Commission for 1,053 innovative European SMEs from the manufacturing sector. Based on a negative binomial regression analysis, the authors demonstrate that heterogeneous effects of product and process innovation on a firm's export scope (level of decentralisation) exist. The results show that firms with only product innovation have a larger export scope than SMEs with both product and process innovation or only process innovation. Firms involved only in process innovation show a lower export scope than firms with other types of innovation activities. Thus, this paper contributes further to the existing literature on internationalisation, decentralisation and SMEs.

To conclude: We believe that the integration of network approaches and decentralisation aspects in entrepreneurship and SME research is an important issue and therefore, that this integration has the potential to enrich the research in and practice of all these aspects (i.e., entrepreneurship, networks and decentralisation). Thus, we hope this special issue provides first insights and interesting results in this context. Although diverse, the research questions covered by the papers in this special issue address only a very small portion of the topics in need of further investigation, in this new and exciting field of research.

Finally, we want to thank the many individuals who contributed to the conference and the RSBE project, as well as the authors who submitted their papers and the referees who reviewed them. The theoretical and empirical contributions reported in this special issue and the research questions put forward, we hope, will serve as a catalyst to further integrative research that will increase our understanding of entrepreneurship, SMEs and their networking and decentralisation strategies as a path to wealth creation.