Preface

Networks, knowledge and innovation are the triumvirate of modern business. Innovation is the basis for competitive advantage. It requires the build-up of and access to knowledge. Networks are able to deliver that knowledge. Hence, just as the divisional form was the organizational structure of the industrial economy, networks are the organizational structure of the knowledge economy. This in short appears to be the reasoning behind most recent thinking on management. But if this is true, how can companies ensure knowledge flows through networks in such a way that it benefits their competitive strength? This question formed the point of departure for this book.

Research in this area is abundant. Dozens of papers have been and continue to be published in the academic journals. However, if a manager were to read these papers in order to find an answer to the question concerning how he should manage knowledge flows in networks, he would not find many answers there. The literature has mainly focused on interesting, but abstract theory. Few case studies exist that shed light on knowledge management in networks from a managerial perspective. One paper, co-authored by Dyer and Nobeoka, was an exception and that paper was an important source of inspiration for this project. The authors' approach involved an in-depth case study, showing what mechanisms Toyota's management used to get knowledge flowing in the supplier network of this Japanese car manufacturer.

To replicate and extend Dyer and Nobeoka's findings, a research team was assembled, consisting of researchers with a variety of backgrounds. The team included experts in knowledge management, supply chain management and network management. This diversity was necessary to tackle the complexity of the themes of innovation, knowledge and networks. The members of the research team were: Hans Berends, Elco van Burg, Pim Eling, Tim Graczewski, Irene Lammers, Erik van Raaij, Arjan van Weele and I. Masters students Ingrid van der Burg, René Heunen and Jan Spruijt provided invaluable assistance in organizing the vast amount of data collected from the many interviews.

As a group we went through the normal academic routine of defining our propositions and frameworks, finding suitable cases to study, gathering the material and interpreting it. This book represents the final stage of acade-

mic research: writing it down. Altogether the project lasted over two years. It is tempting to look at the research team as a network on its own and to apply the concepts we use in this book to ourselves. I quote Arjan van Weele, who wrote to me about the process we went through:

During the many exchanges that we had, group learning evolved as did group identity. As a result our small research network did not suffer too much from motivation problems. Neither were we confronted with problems related to free riding as the group kept a tight, though unspoken social and professional control of the contributions of each team member. As the team members started to get to know each other better and the direction the team would go became clearer, knowledge transfer became more structured and efficient. Moreover, as the project moved along each team member became more interested in the results of the others. Although initially many boundaries existed due to the different research backgrounds of the individuals involved and the different disciplines that they represented, these were overcome through constant dialogue and frequent interaction.

No matter how active the research team was, the project would not have succeeded without the help of many others. During the research process we obtained support from a large number of people. First of all I would like to thank the dozens of persons we have interviewed (sometimes more than once) and who have read through our case descriptions. I am grateful so many persons were willing to participate and invest their time in this project. Second I would like to thank Transforum for the financial support for the project. This was instrumental in getting the project off the ground. Through Transforum we also got access to the pig-breeding case. Finally we sent our manuscript to two experts on knowledge networks: Geert Duysters of UNU-MERIT in Maastricht and Marleen Huysman at the VU University, Amsterdam. They read through the manuscript and provided us with numerous ideas to improve it. Thanks to both of them for taking the time to do this. Their insights helped to bring more focus to our work. Naturally any remaining errors are the exclusive responsibility of the research team.

The book has a straightforward structure. The first three chapters are dedicated to theory. Chapter 1 describes the model behind the book. Chapters 2 and 3 respectively deal with networks and knowledge management. Chapters 4 to 8 are devoted to cases of innovative knowledge-sharing networks. Chapter 9 draws conclusions across these cases. The final chapter contains lessons for managers.

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