Book review


The book belongs to the series 'The Emerging World of Chains and Networks'. The book provides some interesting insights in synergetic effects of chain collaboration, pre-requisites for geographical clusters and chain co-ordination. Most of this is based on existing knowledge, and the greatest value of the book is the application of theory to cases.

Chapter I gives an interesting analysis of the research field of chains and networks. It describes important trends in the business environment such as mass-customisation for fast responsive business-to-customer relationships, new information and communication technologies (ICT) enabling innovative relationships between businesses and reduction of transaction costs, increasing social, economic and environmental demands for sustainable production and the emergence of geographical clusters. To cope with the challenges imposed by these trends businesses need to collaborate in chains and networks. ICT enables new relationships through 'electronic integration' and 'electronic brokerage'. It eliminates intermediaries but also creates new network based entities: cybermediaries. Another trend is the search of businesses for new collaboration forms, such as clusters, to get access to unique combinations of input factors knowledge, infrastructure, resources, etc.

The chapter concludes with the definition of main research themes: trust, incentives and contracts; innovative chain co-ordination concepts; horizontal collaboration; impact of information and communication technology; clustering; sustainability.

Chapter II (Collaboration and synergetic advantages in chains and networks) discusses types of collaboration, intensity of collaboration and stages of collaboration, leaning on existing literature. A classification scheme, designed in one of the case projects (with dimensions of collaboration: time-horizon, objective and impact of collaboration) leads to the identification of three stages of synergies: operational, co-ordination and network synergy.

Operational synergy encompasses short term synergy effects based on existing processes and locations and better use of existing resources. Co-ordination synergy encompasses medium term synergy effects based on new processes at existing locations and improved co-ordination. Network synergy is the most advanced form and includes effects that result from close co-operation (long-term). It searches for new structures, new processes on new locations.

Two cases are discussed in this chapter: Distrivaart (to investigate the development of a multi-modal network for combined pallet flows between suppliers and retailers) and Zoetwarendistributie Nederland (to establish an alliance between bakeries to reduce physical distribution costs and improve customer service).

In both cases distrust and disagreements about the division of costs have lead to the choice for non-optimal governance form. Moreover, the bakery case proved to be very vulnerable to shifts in participants (reducing the critical mass of the collaboration). In the discussion of the cases the importance of logistics service providers as independent enablers of these types of collaboration between businesses, is underlined. Unfortunately, rather limited information on the cases is given to provide the reader real insight in objectives, procedures and roles of the participants. At the end of the chapter a framework for supply chain implementation and a roadmap for collaboration are presented.

Chapter III deals with the subject of 'Clusters in chains and networks'. The approach used to analyse cluster concepts and socio-technical design principles is interesting and challenging. The chapter starts with a description of governance forms: network, market and hierarchy, based on literature. A new governance form is the cluster form: collaboration in business networks concentrated on a specific geographical location. The cluster form is positioned between network and market. Advantages of firms being part of clusters are: increase of productivity of neighbouring firms and/or industries; increase of capacity by innovation; stimulation of the creation of new firms that support innovation and expand the cluster further.

Based on literature conditions for clustering are given. With regard to the creation of successful clusters socio-technical design principles are
discussed: enlargement of self-directing capability, integrated co-ordination, minimal rules and procedures.

Cases in this chapter are ‘Protein Highway A1’ (analysis of collaboration of firms engaged in protein production around highway A1 in The Netherlands), ‘Relocation (investigation on the formation of new horticultural clusters), ‘Core centres’ (analysis of compact business parks), ‘Knowledge intensive clusters’ (development of science parks). Although the framework for analysis is challenging, the content of the cases and the limited description of the cases do not give the reader a rich insight in cluster formation. In fact, none of the cases seems to deal with a real existing successful cluster.

The subject of chapter IV is ‘Co-ordination in chains and networks’. The starting point is the bull-whip effect in chains, which is posed as a key problem in chain co-ordination. The chapter shortly discusses ECR concepts focusing on efficient product replenishment which aims at shorter order cycles, more efficiency and lower stock levels throughout the chain. The chapter continuous with describing concepts, well known from literature, that support efficient replenishment in chains: continuous replenishments planning, vendor managed inventory, factory gate pricing, collaborative planning, forecasting and replenishment (CPFR). Cases that are discussed in this chapter are Van Maatwerk naar Confectie (aiming at supply chain synchronisation in a retailer–food industry chain), Verkorte Verscollectie (aiming at shorter order cycles in a floriculture chain) and continuous replenishment by dynamic green logistics (CPFR in an international potted plant chain). The road map at the end of the chapter is an interesting addition to the chapter.

Chapter V gives conclusions and ends with a research agenda. Some of the lessons learned from the cases are that many failures in practical chain projects occur through lack of trust, misalignment of incentives and incorrect specifications of contracts. It further poses as an important guiding principle for collaboration in business networks the acceptance, by the partners, of a central chain/network ‘orchestrator’. Such a party can be the intermediary between conflicting interests. The chapter concludes with definition of important research themes and discussion of the health sector as a promising field for chain and network research.

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