

Chapter 5

Putting Clusters to Work

Rodin Genoff

Rodin Genoff & Associates, Australia

Graeme Sheather

University of Technology, Sydney, Australia

ABSTRACT

This chapter illustrates the effect of clusters on company performance through rigorous mapping of the patterns and strength of relationships between companies applied in the Aalborg region of Hub North, Denmark. This case study has been selected from similar industry cluster projects undertaken between 1999 and 2013 in Midjuttland, Denmark, Dalarna, Sweden, mining regions in Queensland, and the Playford industrial region in South Australia. A conceptual methodology and suite of tools that have translated cluster theory into bottom up business outcomes for companies participating in these cluster projects demonstrates how a deeper understanding of clusters can contribute to the economic development of industrial regions. The methodology and findings described in this chapter pioneer new insights and ways to analyse emerging cluster developments.

INTRODUCTION

This chapter illustrates the effect of clusters on company performance through rigorous mapping of the patterns and strength of relationships between companies in a methodology developed by Rodin Genoff & Associates and applied in the Aalborg region of Hub North, Denmark. This case study has been selected from similar industry cluster projects undertaken between 1999 and 2013 in Midjuttland, Denmark, Dalarna, Sweden, mining regions in Queensland and the Playford industrial region in South Australia. A conceptual methodology and suite of tools that

have translated cluster theory into bottom up business outcomes for companies participating in these cluster projects demonstrates how a deeper understanding of clusters can contribute to the economic development of industrial regions. The methodology pioneers new insights and ways to analyse emerging cluster developments.

Part One outlines the Business Opportunity and Strategic Potential Framework (BOSP) model that forms the conceptual basis and methodology to explore a region's competitive capabilities and its level of interconnectedness, both locally and globally. Responses to a Performance Audit and Cluster Survey questionnaire are used to identify

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the strengths and weakness of the local business networks. The framework compares the effectiveness of a company's ability to 'Win Orders', and relates this to its central position in regional 'Supply Chain' and 'Product Chain' networks operating between the company and its first tier suppliers and customers. Sets of Network Maps based on supply and product chain Transaction Scores are used to identify the array of Connector Companies, that is, the most interconnected clusters within the region. Finally, Cluster Companies and their characteristics are used as input to the Business Collaboration Process (BCP) to leverage their 'Competitive Capability' and 'Business Outcomes' through joint ventures.

Part Two summarises the Business Collaboration Process (BCP). The BCP has been deployed through putting to work 'connector' companies identified through the industry and cluster mapping processes described in Part One, or working from the bottom up individually with selected companies to optimise business collaboration opportunities. This results in the formation of new joint ventures between companies that bring together complementary business services right through to companies working across disparate yet connected industry clusters such as electronics, creative industries and engineering, to spinning off completely new companies as a result of the formation of strategic alliances.

Such collaborations in high cost economies and especially between small to medium size enterprises (SMEs), develop over time deep reservoirs of trust that are a prerequisite for companies to work more closely together. These collaborations result in reduced transaction costs – planning and decision making is faster and more integrated. A direct spinoff of this trust is the creation of a milieu that fosters innovation and the ability of these business partnerships and collaborations to compete in niche markets, particularly in markets that require tailored products and services.

Hence one of the key outcomes of SMEs collaborating together in high cost economies is the

ability to provide turnkey solutions to their customers. This has several benefits from increasing their ability to work as an integrated team to win new contracts to cooperating more effectively with their customers to improve say engineering specifications and design as they go into production. For their customers, this means faster turn around and superior end product. It is this interaction that increases the competitiveness of these SMEs in high wage economies, while delivering a regional productivity dividend back to the industries and regions of which they are a part..

Part Three provides several practical examples and outcomes of this process at work and discusses how it has helped to transform the companies that have participated in these cluster projects and in the process, created new jobs, while building the capacities and capabilities of SMEs at a regional level.

The conclusion outlines the lessons learnt from developing clusters across a range of industries from mining, engineering, electronics and related software companies to cleantech and the creative industries.

Methodology in Relation to Existing Cluster Literature

The cluster methodology described in this chapter is an example of applied research. Its findings can be positioned to add to and provide new understandings of existing literature on cluster development and formation. The findings show the capacity of businesses to generate opportunities for regional growth and joint venture development through identifying 'latent nodes' for collaboration and networking. This also demonstrates where the cluster methodology differs from current approaches.

The following provides an outline of where the cluster methodology and its findings draws from and contributes to existing cluster literature.

The cluster methodology demonstrates how to integrate theory and practice. It is an action

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