Supply Networks: Genesis, Stability and Logistics Implications. A Comparative Analysis of Two Districts

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This study concerns networks whose elements are made up of manufacturing units linked by supply relationships. The authors, comparing the evolution of two industrial districts, analyse the variables that determine or impede the formation of strong linked buyer-suppliers systems, influence the network stability and fashion the logistic pipeline mapping and management. Three central propositions are discussed: (a) the setting up of a supply network process is connected to the presence of operational interdependencies between the units of the supply chain; (b) the stability and effectiveness of a supply network is closely bound to the ability, on the part of the core-firm, to plan the governance structure of the supply relationship; and (c) the product structure and the nature of the process influence the networking process.

Key words—case study, operations management, purchasing, supplier relationship

1. INTRODUCTION

The term system or network of companies generally refers to a vast range of inter-organizational relations. This study focuses on a particular type of network: companies that, by supply relationships, belong to a common production chain. The principle vehicle of interaction/integration is thus the material flow which passes through the units of the chain. The barycenter of the system is, in this case, a ‘core-firm’ which contracts external units to produce parts of the finished product and manages the outward flow.

Numerous theories deal with inter-organizational relations and the boundary lines between them are not always clearly defined (e.g. the Agency Theory [21], the Resource Dependence Theory [29–31], the Population Ecology of Organizations [3, 16, 17]). According to the Transaction Cost Theory [39, 41], which is probably the most widespread theoretical approach (and the preferred one also in this study), networks of companies represent an intermediary solution between the integrated manufacturer and the ‘market’, i.e. the complex of independent manufacturers with whom exclusively short term (‘spot’) transactions are established.

In the middle range situations, suppliers and buyer agree to co-operate with one another to form a long-term, co-operative relationship guided by expectations of repeated transactions. This type of relationship is characterized by ‘neo-classical contracting’ [41, 42].

According to a large number of contributions, competitive challenge has brought, especially during the 1980s, success to the systemic