Chapter 36
The Keystone Sector Analysis

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ABSTRACT
This chapter is written to describe a different vision on how to make use of a simple network diagnosis instrument in order to identify and describe the network structure of a set of diversified institutions located and acting in a regional environment. The use of this analytical framework enables policy makers to intervene in a variety of manners. After a detailed literature review of different discipline approaches, we describe different models for network formation and present the keystone sector analysis as a parsimonious centrality measure existing before more recent and complex frameworks used in reduction crime policies with the same definition (e.g. inter-optimal centrality). Considering the embeddedness in social network environments where different institutions – private, public, third sector – make decisions and influence future decisions, the keystone sector analysis is also helpful to uncover some methodological weaknesses in socioeconomic development and provide new opportunities for policy purposes.

INTRODUCTION
The seminal motivation for this chapter relies upon our theoretical and practical involvement in the debate about possible explanations for regional development lags. The existent economic literature over the year 2000 is either focused on firms, productivity and employment or on the relevance of social interactions, networking and technological/knowledge spillovers. The broader literature review is mostly focused on some of the most applicable and prominent papers from macro and regional economics. Temple (1999) suggested the need to examine other aspects beyond those adopted in mainstream macroeconomic growth and development models. In comparative studies, a number of authors referred the need for deepening macro and micro considerations, acknowledging scale and spatial effects; some others pointed out significant qualitative issues and social habitat diversities that boost regional actor dynamics.
(Cappellin, 1992; Florida, 1995; Cheshire and
Gordon, 1998; Camagni, 1999; Funck, 2000; Jo-
hansson, 2000; Malecki, 2000 and Stough, 2001).

Working in real socioeconomic development
projects in my country (the kind of urban renewal
projects, regional tourism strategies or local sport
policies) also taught me that the number of indi-
viduals that really influences important political
decisions is quite small. In fact, people are tied by
one or more specific types of relationships either
direct or interdependent. The more relationships
an individual has within (and out) of his commu-
nity, the more likely he will collect knowledge,
influence and power. Part of this constitutes the
personal and pragmatic motivation to study and
use social network analysis in order to map the
relevant ties between the people (nodes) we were
dealing with.

Another piece of the motivational problem
could be settled as follows:
Consider two regions located in different
countries but sharing similar economic structures
in terms of their industry composition, popula-
tion size, resource endowments, relative location
to major metropolitan regions and so forth, and
where one of them is growing more rapidly than
the other. The standard toolbox of regional sci-
ence techniques has been unable to identify the
cause of these growth differences. Applications
of sophisticated econometric techniques informed
by concerns with spatial correlation reveal that
there may be a missing variable problem. The stan-
dard economic approach has been to explore
either re-specification of the modelling system
acknowledging for spatial effects or searching
for additional exogenous economic variables. Al-
though some other authors refer to social capital,
cultural business environment, history and other
difficult quantifiable measures, our hypothesis is
that there may be another alternative explanation
lying in community internal factors associated with
its’ social structure and with the special influence
of some ignored issues such as the central or key
role played by some actors, their information and
influence flows and/or the relational densities
or location of special agents within the network
community.

Last but not least, there is a political relevance
for this topic of study once it can contribute to
improve the efficiency of the public funds/ invest-
ments allocations in order to better off the general
socioeconomic level and quality of life of the
regional inhabitants. In the earliest 21st century,
most of the EU funds were invested for regional
purposes in industrial high-tech support; usually,
these industries are clustered in the mid-sized
developed towns, which allocated some of the
residual structural budget to sustainability of the
rural landscapes and to accomplish tourism goals.
However, there is a lack of knowledge about the
way innovative actors developed their interactions
with other entrepreneurs (either collaborators
or competitors). In conclusion, going deeper in
the understanding of the social structure of the
decisional architecture of a town/region assumes
paramount importance to improve overall political
efficiency and eventually make the right selection
about who is worthy to be funded/supported.

In this chapter, we support the notion that
social network analysis is an interesting and
complementary method to highlight the evidence
that intangible factors partially explain why some
regions/organizations thrive and others do not;
moreover, through specific centrality measures
used in keystone sector analysis we can extract
some internal community factors as possible
complementary explanations for different grow-
ing/development processes, barely referenced in
most of the literature. We do easily demonstrate
that policies can be improved by accurate social
network diagnosis/evaluation processes; therefore
networks used to improve businesses, organiza-
tions and innovations.

Who are the key players in the game of devel-
opment? How does brokering processes should
develop in a regional/organizational network?
How can we save resources when we want to
develop local policies? Why consider everyone