

Informal R and D and (Real) National Innovation Systems

Morley S. Lipsett and Richard K. Smith
School of Communication , and
Center for Policy Research on Science and Technology
Simon Fraser University
Vancouver, BC V6B 5K3
e-mail: lipsett@sfu.ca and smith@sfu.ca

Abstract

In recent years the notion of National innovation systems has come into prominence as a way of illuminating the processes, institutions and actors responsible for industrial innovation and economic growth at the country level. Policy makers and analysts, however, tend to regard the notion as an overly precise tool with which to achieve national prosperity rather than an attempt to more fully understand the institutional and human dynamics which give rise to innovation. Furthermore informal research and development (R&D) is left out of the equation. Using new information, some contained in taxation statistics and some contained in a new industrial demographics database, we demonstrate the R&D and innovation are widespread and involve many more people than commonly thought. Contemporary pictures of sparsely occurring innovations are showing to be misleading - at least in the case of Canada. This finding invites a rethinking of innovation policies. A new epistemology is needed to account for the ubiquity of innovation as well as to include actors and factors not usually ascribed to national innovation systems. We suggest, for example, that technologists and technicians figure prominently in the creation of specific innovations but seldom get and credit for their role. We also discuss factors such as trust which are seldom mentioned as influences yet surly encourage or stifle innovation.

Trapp, Robert (ed.). *Cybernetics and Systems '96 Volume 2*, Vienna: Austrian Society for Cybernetic Studies, 1996, pp 670-675.