

costs of a market exchange and sometimes to mean an externality (that is, the effect caused by a market exchange on someone not a party to that exchange).

There is a huge and growing literature relating transaction costs and externalities, but they are distinct concepts. Nothing is gained by lumping them together under a new term; in fact, doing so leads to unnecessary confusion, as Bates' discussion of advertising and education shows. Along with other authors in this book, Bates sees the imperfections in private market transactions, but then views the government sector as smoothly functioning and well informed.

If the term "political economy" is to mean anything useful, it must be related to the economics that is taught in most recognized universities. *The Political Economy of Information* is an example of false advertising. It will certainly mislead any student curious about the real world.

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Measuring the Information Society

Frederick Williams (ed.)
Newbury Park, Calif.: Sage, 1988, 286 pp.

The collection of 16 research reports and three abstracts provides a detailed and useful look at how Texas has waged a systematic campaign to adapt from a cattle, cotton and oil economy to a high-tech one. Although the campaign hit a downturn in the mid-1980s as the overall Texas economy dipped, the strategy seems to be taking hold as Texas emerges as an important component of the information society.

No claims are made that the Austin corridor is another Silicon Valley or Route 128 in Boston, but a major high-tech organization, comprising 20 companies as shareholders, has settled in, and in turn, spawned a number of new high-tech companies. The parent corporation, Microelectronics and Computer Technology Corp. (MCC), includes Eastman Kodak, General Electric, Westinghouse Electric and Hewlett-Packard Co.

The text, which includes an overview chapter by its editor, Frederick Williams, provides a case study, in effect, of an orchestrated process in which a state fights for economic independence. Tying its fate to a post-industrialized economy based on a growing army of "knowledge workers", Texas is seeking to develop computing and telecommunication technologies—the keys to an information society. At the same time, in an economy where knowledge is a raw material, education and training have become a critical value and the University of Texas at Austin is playing a major role.

Somewhat self-serving in its approach to Texas and the university, the text—which could use some informational graphics in addition to charts—helps provide a

basis for understanding the process of how the new Texas environment is emerging: how the new is changing the existing landscape. Most of the chapters are empirical or analytical, but the last looks at the attitudes of 10 prominent Texans. In effect, the focus group helps to put the values of the past in a context of the present. The views are collated as themes of change that are rooted in the past. For example, Texans are said to be imbued with a frontier spirit, and a belief that all things are possible through hard work. Such an approach, fortunately, works nicely whether the work be developing the much revered land, or computer software of the information age.

One of the themes of the paperback book is one of interaction. This is expressed in the belief that in the 1990s there will be an expansion of management information systems from within the single firm to its suppliers, customers, vendors and financial services. It is also expressed in the development of the technopolis concept. The technological city requires, as recruiting MCC did, the cooperation of the university sector, especially research and development in computer science and engineering, local government, state government, federal government, large corporations emerging corporations, and, support groups, such as the Chambers of Commerce.

The book does tend to promote Texas and the tale is not exactly told warts and all. Despite the fact that one chapter decries that telecommunications has been a nearly invisible component of the evolving information society, the book itself could use more than it has on this key area. It does, however, explore the role of computers pretty well. Texas appears to be preparing the computer foundation in its school. Most have computers. By the late 1980s, there was a lab with at least 10 computers in each of the middle schools and high schools, and at least five in 75 percent of the state's elementary schools. In the workforce, one of every three Texans worked with computers and by the summer of 1986, one in five Texas households had a computer.

Overall, the book is a stimulating case study of an issue that has major national implications in the United States. It uses diverse methodologies and diverse sources and synthesizes it all very well. The title may perhaps not quite do the book justice though. The pages don't primarily measure the information society so much as to provide a receipt for making one.

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