that "it cannot be denied that this transaction relation and the distribution system that is based on it creates a barrier to new entrants, not only to foreign but also domestic ones" (p. 70), he insists on the acceptable economic rationale of the distribution system. His conclusion is that "it is extremely difficult to derive any policy implications from this since there is no established theory to deal with the problem" (p. 70).

'Objective' economic analysis, or an apology and justification for existing Japanese forms of organisation and the trade-related problems that they sometimes imply? In the reviewer's opinion, this is not a meaningful question to pose. Rather, it is accepted, along with the editor and his contributors, that it is first necessary to *explain* the evolution of 'Japanese forms of organisation' and to examine the *effects* of these forms including the costs and benefits which they impose as well as the parties on which they are imposed. A more fundamental question, a question which must be answered in order to decide whether this book and the approach taken by its contributors is ultimately satisfactory, is whether the explanation that they offer is adequate.

In briefly examining this question, it must be stressed that the approach taken is *logico-deductive*. More specifically, the argument proceeds as follows: In the real world, transactions are bedevilled by problems such as information shortages and asymmetries; particular forms of organisation (such as long term organisational transacting) can deal reasonably effectively with problems such as these; Japanese forms of organisation exhibit such characteristics; therefore Japanese forms of organisation have a justifiable economic rationale.

In *logical* terms this approach is perfectly acceptable. It does not, however, follow that the same is true in *historical* terms. For example, it is possible that historically a different logic was followed, a logic not catered for by the assumptions of the transactions cost approach, which shaped the evolution of the particular form of organisation. In short, while the logico-deductive approach is suggestive, and is capable of yielding interesting propositions about different forms of organisation, as the present volume amply demonstrates, it is no substitute for detailed empirical investigation of the evolution of forms of organisation. Much empirical work still remains to be done if we are to really understand Japanese forms of organisation and their evolution.

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Resource Guide for the Management of Innovation and Technology *by William R. Boulton* (American Assembly of Collegiate Schools of Business (AACSB), St. Louis, 1993) pp.250.

This resource guide has been compiled for the benefit of anyone interested in developing Management of Innovation and Technology (MOIT) teaching programmes. These courses could range from a Master in Technology Management to a management of innovation elective in a generalist Master in Business Administration (MBA) degree. Undergraduate programmes are also investigated. Quite an extensive postal survey was used to gather curriculum details and letters were sent to some 675 Deans and 1,600 faculty members. The compendium is the result of contributions from about 70 institutions from around the world.

The resource guide is divided into 7 sections: Section 1 provides a brief overview of MOIT and discusses the importance to a nationa of commercialising science and technology. It argues the need for MOIT to be included in business school curricula. Nevertheless, it correctly recognises that a stumbling block to the construction of MOIT courses is their cross-disciplinary nature which requires integrated inputs from business, engineering and science to enable a holistic programme to be taught. This may be a big step forward for many business schools still operating by departmentalisation rather than through inter-disciplinary type activities.

Section 2 gives examples of core MOIT programmes. Many of the syllabuses are case based which reflects their integrative character. "Managing Corporate Technology and Innovation" by R. Burgelman from Stanford University includes details on target audience (e.g., MBA), course objectives, general outline of the course (e.g., (a). Integration of Technology and Strategy (b). Design of a Technology Strategy (c). New Product and New Business Development (d.) Designing and Managing Innovative Systems), cases and questions and recommended and supplementary readings. Unfortunately, many other syllabuses included vary in their depth and consequent usefulness. This weakness is nevertheless tempered by the thoroughness with which other courses have been prepared and documented. For example, the syllabus by Dorothy Leonard-Barton from Harvard Business School discusses the course themes covered by cases, where the course fits into the MBA curriculum, possible assignment topics and additional reading options.

Section 3 reflects the fact that many MOIT courses are being taught for the functional areas of business and engineering schools. Many examples are included for accounting, organisation behaviour, marketing, entrepreneurship, product development and research and development management. Again, each syllabus varies in the amount of information provided but nevertheless, it does enable anyone interested in developing a course to have a flavour of what is currently on offer. The number of syllabus examples within each functional option vary from 9 for organisation behaviour to 1 each for accounting and marketing.

Section 4 provides examples of different types of assignments. These illustrate how MOIT assignments must be practical and integrative and should build upon cross-disciplinary case study teaching. An example of a project assignment concerns the selection of a successful new product introduction. Course participants have to (a). describe the product (b). provide statistical information to prove that it is a winner (c). describe the process used for its development and introduction (d). explain the reasons for its success. It might have proved useful to incorporate into the resource guide far more examples of actual course assignments showing which courses they were specifically targeted at, how the assignments have developed over time and grading assessment guidelines.

Section 5 comprises a summary of readings which are frequently used in MOIT courses and includes a cumulative index for the *Journal of Product Innovation Management*.

Section 6 gives descriptions of available MOIT programmes. These range from a Master of Technology Programme offered by a consortium of 35 US Universities known as the National Technological University (NTU), to the New Zealand Innovation Project which has been established to foster teaching and research in this important area. Examples of programmes which offer MOIT certificates or diplomas are also included. Useful information is embodied in this section on how to go about marketing programmes. It also provides a useful networking mechanism as the names of course co-ordinators are included.

Section 7 concludes with a list of the contributors which again acts as a useful networking mechanism.

This resource guide has succeeded in its purpose, namely, to help generate ideas for anyone interested in developing or improving their MOIT courses. Thus, it should assist institu-

tions establishing their own individual, specifically tailored programmes. In this regard, it is being effectively utilised at the Victoria University of Wellington, New Zealand in the development of a Master in Management (Technology) programme. It is apparent that it will be used by interested parties to network amongst themselves. At US $25 this is a resource well worth buying.

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The creation of technological capability in developing countries: a study prepared for the International Labour Office within the framework of the World Employment Programme *by J.L. Enos* (Pinter Publishers, London and New York, 1991), pp.224, ISBN 0-86187-127-8.

It is now almost three years since the publication of Enos' book, but the broad issues it addresses are still the subject of much debate amongst those concerned with the technological aspects of development. At the outset, it should be said that this review will concentrate on the assumptions and implications within Enos' work from a broadly cultural perspective, rather than examining in detail the nuts and bolts of Enos' economic modelling and theory, as it is beyond the disciplinary knowledge of this reviewer to treat those adequately and thus fairly. But as Enos himself concedes, there is much in this work that goes beyond pure economic analysis, and the review focusses on these aspects.

Enos seeks to develop a systematic model for analysis of endogenous technological capability applicable across medium-sized developing countries with the end of developing optimum policies for such countries. As a starting point, Enos acknowledges the failure, or at least the non-success, of the appropriate technology movement to capture the imaginations of the elites of developing countries concerned with industrial development. For Enos, this means that instead of looking at the consequences of technological change, attention should instead be given to the development of technological capability (written as TC from this point), to better allow countries to adopt and make the best of existing techniques, as well as to modify and adapt those that are not yet wholly appropriate for the needs of the particular country.

First, Enos deals with definitions of TC, which he defines as having three components: first, the technical skills of individuals; secondly, the need for individuals to meld and work within groups; and finally common purpose within and across groups. Enos argues that this synergy is a necessary component of TC. After outlining various other definitions of TC Enos decides that although there are various differences in emphasis, the content is quite similar. Following this, Enos decides that the most appropriate tool to explore this definition of TC is the analytical model, rather than performance indicators or mapping techniques, and expresses a preference for mathematical models over those that are verbal or schematic. Enos' three-part definition of TC is a good working notion of the subject, and although no mention is made of more controversial notions of technology and society this is not necessarily expected in such a pragmatically directed document. As Enos concedes, the last part, that of "common purpose" is the most problematic and also the least amenable to mathematical study, being an "immeasurable". Enos also states that common purpose within an institution may or may not be in concordance with "national interest".

Part Two look various economic models in terms of TC. Chapter 3 examines detailed