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THE USE OF INDUSTRIAL CONSULTANTS IN
DEVELOPING COUNTRIES ^{1/}

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^{1/} The views and opinions expressed in this paper are those of the consultant and do not necessarily reflect the views of the Secretariat of UNIDO.

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

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Contents

| | <u>Paragraphs</u> |
|---|-------------------|
| Introduction | 1 - 3 |
| I. INDUSTRIAL AND MANAGEMENT CONSULTANCY: AN OVERVIEW | |
| Why use consultants? | 4 - 19 |
| Other suppliers of research and advisory services | 20 - 36 |
| The rise of consultancy | 37 - 38 |
| II. WHEN ARE CONTRACT SERVICES APPROPRIATE? | 39 - 60 |
| The problem | 41 - 50 |
| The firm | 51 - 60 |
| III. SELECTION OF CONSULTANTS | 61 - 85 |
| Information and rosters | 63 - 66 |
| Selection criteria | 67 - 75 |
| The selection process | 76 - 85 |
| IV. WORKING CONDITIONS AND RELATIONSHIPS | 86 - 97 |
| Host country regulations | 87 - 90 |
| Governmental support of private advisory services | 91 - 97 |
| V. DEVELOPMENT OF LOCAL CONSULTING PROFESSIONS | 98 - 118 |
| Incentive | 100 - 103 |
| Indirect incentives | 104 - 107 |
| Training | 108 - 117 |
| Organization of the consulting profession | 118 |
| VI. A FINAL NOTE | 119 |

ANNEX Bibliography

Introduction

1. Only hazy and incomplete answers are available to some of the most interesting and significant questions concerning the use of industrial consultants. It is often difficult to identify the factors that make one assignment more successful than another. Sometimes, as discussed below, it is even difficult to decide whether a consulting relationship has been successful or not, to say nothing of the problems of measuring relative degree of performance and of determining the elements responsible for such success or failure. The inputs into a consulting assignment are mainly human. The consultant may provide special skills, talents and knowledge, but both he and the client must also contribute time and effort, judgement, common sense and insight, and a willingness to join together in the search for better solutions. The outputs of such an assignment are mainly intangibles: plans, ideas, recommendations and suggestions. None of these inputs and outputs are particularly susceptible to measurement and analysis.

2. Appraisal problems, questions about the selection process, and uncertainties about the proper roles for consultant and client exist even when, as is usually the case, the consultations take place within a purely domestic setting. Some, but not all, of the questions about consultancy become even more complex when the relationship reaches across national boundaries. Thus, we must agree with an American economist who points out some of the shortcomings in our knowledge of consultancy, particularly our lack of really satisfactory cost/benefit appraisals. But we should also note, as he does, that these shortcomings apply to our understanding of practically all avenues for the transfer of knowledge and talent:

"At a factual level, we still know remarkably little about the international transmission of 'know-how'. How does technical knowledge in fact find its way from the advanced to the less developed countries? One can think of various channels: branch plants or joint ventures initiated by companies from the developed countries; 'turnkey projects' in which a foreign company builds plant and manages it through the 'teething stage' of development; technical assistance by engineering and management consultants from the developed countries; the missionary work of salesmen for modern machinery and other imports. (The work of these people should not be underestimated. I have heard it said that in American agriculture the work of the machinery salesmen, the hybrid corn salesmen and the rest may have been as important as the activities of the extension agents.) Then there are the slower processes of education, of sending students abroad from the less developed countries for technical training, importing teachers and research workers from the advanced countries, and so on.

"Each of these channels makes some contribution. But what is their quantitative importance? Are some of them more efficacious than others in overcoming resistance to innovation and getting new knowledge transferred, adopted and applied? ... One hears much casual discussion of similar questions concerning the transfer of economic competence but I have not seen economic analysis applied systematically to this kind of optimizing problem." (48)

3. One must also agree with a prominent researcher who has pointed to the astonishing dearth of research on the nuances of consultant-client interaction.(9) And yet, having admitted to how little we know about consultancy, we must also acknowledge certain other facts. The growth of flourishing economic enterprises and the development of an expanding economic system seem to call for the creation of a host of organizations and institutions ancillary to the basic industrial core of processing, manufacturing and distributive establishments. The requirements for ancillary institutions seem to include a need for specialized agencies or firms to provide engineering and managerial advisory services so that the core establishments can draw upon resources over and above those of their own staffs. For reasons that will be discussed below but that are probably self-evident, no firm, from the smallest to the largest, can contain within itself all of the competencies for reaching optimum solutions to all problems. In fact, in the industrialized countries, the greatest use of consultants occurs among the more successful, the more progressive and the more rapidly growing firms. Wise use of outside services seems to be associated with, and undoubtedly is an important aid in, growth and expansion. So, in spite of all the question marks, one must finally agree with a third writer who remarks: "The firm that does not use consultants deliberately restricts the scope of its knowledge and experience."(23)

I. INDUSTRIAL AND MANAGEMENT CONSULTANCY: AN OVERVIEW

Why use consultants?

4. The fundamental reasons for using outside engineering, research and advisory services are much the same in developing and developed countries. The degree to which particular types of specialized services are needed, and the quantity of such services that can be absorbed, will of course vary with the industrial and commercial environment in which the client is situated. The availability of outside advisers, the costs of using them, the considerations that the advisers must keep in mind in rendering service, and many other details of the consulting relationship will also vary with the environment. But the basic concept of bringing outsiders into a host firm or organization on a temporary, contractual basis to render research and advisory services rests upon a set of inherent advantages (as well as some disadvantages) that cut across contours of industrialization and economic development.

5. The most obvious reason for using a contract adviser is to supply a short-run need for skills, knowledge or expertise not present in the host organization. A firm that requires a new building at intervals of twenty or forty years would clearly be ill-advised to employ an architect as a permanent member of its staff. Similarly, certain types of design, organizational planning, system installation, production and market feasibility problems may arise too infrequently to warrant the retention of permanent staff with the necessary skills for study of those problems. In such cases, even though the final judgement as to what should be done always remains, and should remain, with the client organization, the tasks of analysing alternatives and preparing recommendations often can, and should be contracted out to external specialists.

6. A somewhat related requirement for outside services arises out of the fact that problems and opportunities usually do not appear at a constant, steady rate throughout the history of the firm. The amount of analytical and research work to be done may fluctuate quite sharply. During peak-load periods, some such work that is fully within the competencies of the existing staff may be contracted out to ease the burden.

7. The oscillations in the need for particular types of specialists within a given (client) organization provide one of the reasons why consulting firms enjoy

an advantage in recruiting certain types of talent. Some professionals find they can be most fully employed, and at their highest level of skill, by working for a successful consulting firm that can rotate them from one assignment to another. Paradoxically, while some men may join these firms to ensure continuity of employment, men who have something of an entrepreneurial cast of mind may be attracted by the same firms' relative freedom from civil service types of employment, compensation and promotion controls. Some able and flexible younger men like to spend at least a portion of their professional life in consulting work because of the training value of the experience. The consulting organization has a special advantage in recruiting or deploying staff for overseas work, since such work is considered part of the normal career pattern in the firm. In contrast, many middle-level people within non-consulting organizations, such as developed-country business houses and government bodies, have felt obliged to refuse opportunities to be seconded out to a foreign organization as a technical adviser because of a fear of interrupting and damaging their careers.

8. The advantages of a consulting career are offset, to some extent, by rather apparent disadvantages. The constant travel requirements are distasteful to many men; some do not like the feeling of always being an outsider, and the strain of constantly coping with new problems; variations within the consulting firm's own volume of business can create tensions and uncertainties. Sometimes, attractive opportunities open up within client organizations. But, on balance, good consulting firms have been able to assemble an impressive array of skills and ability.

9. Several observers have noted that the use of private consulting firms seems to be particularly appropriate when, as is often true in development situations, teams of specialists must be assembled. The large engineering and consulting firms can assemble fairly large groups rapidly, and can provide a network of "backstopping" assistance for the resident staff.(44, 77)

10. While the provision of talents that the client needs may provide the most obvious reason for using contract engineers and advisers, it is by no means the only, or necessarily the most important, one. Extremely valuable services are often rendered by consultants whose technical skills merely duplicate those already available within the host organization. This is true mainly because the outside consultant is an outsider.

11. As a newcomer to the organization, he is in an advantageous position to perceive problems, wastes and inefficiencies to which his clients have become inured. One of the most common anecdotes of organizational life concerns the way in which a reporting or record-keeping requirement, once instituted, will continue to be maintained and observed long after its utility has passed. Often a requirement of this sort lasts until someone approaching the situation afresh finally asks: Why are the reports prepared? Who reads them and what do they do with the information? In time, every organization develops insensitivity to awkward procedures and misconceptions of its external relations. The consultant who is trained to ask questions can help focus management attention on these blind spots. Similarly, the consultant's fresh approach may enable him to recognize previously overlooked solutions and opportunities.
12. Naturally, many of the questions and solutions that suggest themselves to a newcomer, particularly at the early stages of a consulting assignment, will turn out to be inappropriate or incomplete. The newcomer will question practices that rest upon considerations of which he is unaware, and he will wonder why the firm fails to do some things, which it has actually tried and found lacking. But the freedom from the inhibitions imposed by this knowledge is also the freedom to think of appropriate unasked questions and untried approaches.
13. As an outsider, the consultant usually has a unique opportunity, not shared by resident staff, to concentrate on fundamental problems without the distractions of daily routine. Staff engineers, production managers and executives are usually called upon to handle so many immediate problems concerning bottlenecks, individual quality control, customer complaints, and personal problems requiring instant solution that they are left only spare time or scattered intervals to think about fundamental processes and methods. The consultant's freedom from these demands and diversions (a freedom that should be rigorously preserved during an assignment) gives him a great advantage for the study of major questions and preparation of future plans.
14. A consultant usually has considerably greater detachment from internal politics and loyalties within the firm. If he is introduced at a subordinate or middle-management level, he may feel some sense of obligation to or may identify with his sponsors, but the fact that any one consulting assignment is not his permanent source of income gives him a freedom that does not always exist within the staff organization.

15. As he moves about, an observant consultant or engineer becomes something of an international arbitrageur in methods and techniques. Ideas and approaches learned in one country or industry often turn out to be appropriate for transfer to others.
16. One of the rather unfortunate facts of life is that people's evaluation of an idea often depends more on the source of that idea than on its intrinsic merits. Thus, it sometimes happens that a conclusion or recommendation that was apparent to the lower staff echelons, but was ignored or not even presented because of status considerations, will be acceptable to top management when transmitted by a prestigious consultant. This situation is especially likely to occur if the style of management within the organization is autocratic, authoritarian and status-conscious. Having to spend money to bring management's attention to ideas that are already within the organization may be undesirable, but may still be preferable to letting those ideas continue to be ignored.
17. Similarly, recommendations may be much more acceptable if they come from a private engineering or consulting firm rather than from a government agency. Depending on circumstances, this may be true regardless of whether the agency in question is part of the client's Government or a foreign source of technical assistance.
18. The outsider's role may be helpful in refereeing disputes or in enlisting the support of third parties. Bankers, for example, may be more impressed with feasibility studies and estimations of future prospects prepared by recognized, independent consultants than they would be with predictions by the financing applicant's house staff. The independent judgement and experience of a respected outsider serves a certifying function in such cases.
19. One purpose for which consultants are sometimes used in developed countries would seem even more wasteful in environments where skilled manpower and foreign exchange are in short supply. This is the use of a consultant to prepare a set of recommendations or to draft a solution when the executive supposedly requiring the assistance clearly perceives what the solution must be and knows that it will be unpopular with some segment of the company, its stockholders or its public. In such a case, the consultant serves mainly as a scapegoat to draw blame away from the executive making the decision. In other cases, where the executive believes he knows the answer (which may not be an unpopular one), he may still sincerely

desire the consultant's recommendations as a test and confirmation of his judgement. Such a desire can become extremely dysfunctional when carried to extremes, but there are instances where the use of consultants for this sort of reinforcement is quite legitimate. Finally, in all parts of the world, there are times when the request for a consultant's report is simply a manoeuvre to avoid a decision. This use of consultancy is to be deplored, wherever it may occur.

2. Other suppliers of research and advisory services:

20. Many sources of advisory and research services are available, under various conditions, in addition to, or in conjunction with, consulting engineers and management consultants. The following notes indicate some of these sources, with some observations on the particular characteristics of a few of them. The list is not intended to be exhaustive, but it should suggest the range of facilities that may be drawn upon at various times. The order of listing does not indicate relative importance.

21. Supplies of merchandise and equipment: Firms that sell complex mechanical, electronic or office equipment frequently find that they must provide considerable advisory services to obtain and hold customers. An office machinery salesman today, for example, must often function as a consultant on clerical procedures. Similarly, elaborate pre-installation studies and utilization advice may accompany the sale of industrial machinery. Quite naturally, sales representatives have a strong interest in recommending the installation of their products, and their views cannot be considered as entirely unbiased. Nevertheless, the more enlightened and reputable firms, as a matter of self-interest, do not want to sell their products for wholly inappropriate applications, and in many instances sales engineers and analysts have recommended against installation of their own products. In some cases, where the decision is of considerable importance to the purchasing firm, an independent engineer or consultant may be retained to help evaluate proposals from several prospective suppliers. The quality of the advisory services that will accompany the machinery is one of the factors that should influence the final evaluation.

22. Another type of supplier-furnished advisory service may accompany merchandise intended for resale, where the vendor may furnish his agents with a good deal of management advice. Sometimes, particularly in the case of "franchising" types of arrangements, this advice may extend almost to the point of control and may include suggestions or instructions on such matters as design of facilities, promotional practices and record-keeping procedures.

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23. Buyers: Management advice, help in product design and engineering assistance sometimes extend backwards or up the supplying channel, from purchaser to his supplier, particularly when the former is much larger than the latter. Large industrial organizations frequently find that they must devote considerable attention to their suppliers' quality control and production problems. (5) Some large-scale distributive organizations have also invested considerable effort in developing local suppliers. A current trend towards expansion in the number and size of multinational distributive firms suggests that this form of advisory activity will probably increase in the future.
24. Counterpart firms: One suggestion that appears rather frequently is that successful firms in the developed countries might undertake to sell advice, assistance, and possibly licensing privileges, to non-competitive counterparts elsewhere. Carried beyond a certain point, such an arrangement would begin to resemble the managing agency system, and in another sense it could present some of the characteristics of a joint venture except for the important elements of shared ownership and risk. However, as suggested here, the plan simply calls for the more experienced firm to sell advice which the buyer might accept or reject as it sees fit. (14) This arrangement has been tried in various instances. Apparently it has been of some help in Greece, for example. (39) Nevertheless, at least one development agency, the Nacional Financiera of Mexico, reports it had a high percentage of failures when it tried purchasing corporate "know-how" on a cash basis, since the foreign firms were not sufficiently committed to the success of the project. (38) Moreover, as pointed out by the Advisory Committee on Private Enterprise of US/AID,^{2/} this sort of counterpart activity can normally develop only when the firms on both sides of the transaction are relatively large. (68) Some of the problems of maintaining long-run interest on the part of the advisory firm disappear in the case of "turnkey projects", where the responsibilities last only over the period required to establish a plant and get it into full production. On the other hand, such projects require the assisting firm to supply much more than advice.
25. Banks and other financial institutions: While bankers have traditionally supplied at least a modicum of advice with their loans, bankers' advisory services now seem to be expanding and becoming institutionalized. Two rather

^{2/} United States Agency for International Development.

obvious factors strengthen the banker's hand in rendering or recommending such services. One is the bank's experience in dealing with many firms, a background that can provide an intimate insight into the differences between good and bad practice. The other is the bank's control over funds and interest in the firm's financial results, conditions that provide considerable leverage in urging change. Japanese banks, for example, have been setting up "Management Information Centres" to encourage and assist in the rapid modernization of Japanese management. (28) Development banks naturally assume a special obligation to provide guidance or, at least, to help make consultative services available. (7) One limitation on development bank assistance is that it tends to be available only at certain stages, albeit very crucial ones, of their clients' corporate existence and, as is true of banks in general, only to their own borrowers. Bankers themselves differ in the extent to which their advice will be framed in a truly entrepreneurial and expansionistic framework rather than a cautionary one. There are limitations on the bankers' own knowledge and expertise, and on the amount of time that can be devoted to the problems of any one client. The banks sometimes overcome these limitations by recommending consultants to their clients, and in some instances helping to finance the purchase of consultants' services.

26. Realtors and estate developers: Considerable interest has been directed towards the industrial estate or industrial park as a focal point for the provision of management advisory services. The presence, in a planned industrial community or development, of a considerable number of manufacturing and processing enterprises that often have somewhat similar problems suggests a natural opportunity for the creation of a viable advisory service. In some instances, particularly in India, government industrial extension services have used industrial parks as bases of operations and demonstration. But generally, although the industrial park concept has proven useful and successful, the common services developed so far seem mainly to be in such fields as workers' canteens, vocational training and, possibly, joint machine shops rather than in technical or managerial support. (6, 8, 51, 62, 64, 65)

27. Academic institutions and faculty: Educational organizations and individual staff members may provide consultancy services in developing areas under several different arrangements. Individuals may be recruited from overseas institutions on direct contract for temporary work, or may be employed through a chain of one or more intermediate contractors. Similarly, a university or college may accept a direct contract, or may be enlisted under an agreement with a national or multinational agency. The academic institutions and their staffs within the developing countries may undertake advisory tasks under comparable arrangements.

28. Such consultancy arrangements have several advantages for both parties. The universities and engineering schools have, through their faculties, a storehouse of knowledge and talent that can be placed at the disposal of firms and agencies in the developing countries. Moreover, teaching schedules and other arrangements are such that people can often be freed for advisory tasks on reasonably short notice. The prestige attaching to academic degrees in most parts of the world may help the professorial consultant in performance of his tasks, although at times he may encounter suspicion that his ideas are too abstract or theoretical. Projects staffed with university personnel tend to cost somewhat less than those using commercial engineering or advisory organizations. On the other hand, consulting experience tends to contribute to the academician's own knowledge and insight. Both the academician and his institution gain from consultancy pursued in moderation and with some attention to diversity of tasks. However, the latter stipulation may run counter to what the clients want, since they tend to seek someone who has successfully solved the same problem in the past. Clearly, applied engineering and business management institutes of developing countries must allow, and should encourage, their faculties to undertake a reasonable amount of consulting work. In any event, some such work will often be necessary to keep their staffs satisfied, both financially and professionally, in view of the alternative opportunities these people enjoy.

29. Nevertheless, there are limits upon the extent to which faculty can be used for consultancy purposes. Universities have found that an unwise selection or acceptance of advisory tasks can be disruptive of their own programmes. In general, universities seem to fit most comfortably into work with counterpart educational, research and extension institutions overseas. Scheduling flexibility is not as great as in many large-scale engineering or consulting firms. The differences between basic and applied work can create a problem

unless personnel with an aptitude for applied work are carefully selected for an assignment. The needs for, and the utilization of, equipment in industrial research tend to differ from the equipment requirements and use in classroom demonstration. These factors have tended to encourage the development of semi-autonomous research institutes and centres within university structures and, perhaps even more significantly, the growth of independent research organizations that maintain fairly close informal relations with the academic community. (56, 63)

30. Trade associations, research associations, and chambers of commerce: The strength and functions of multi-firm organizations vary greatly from country to country, and from industry to industry within countries, depending largely on the extent to which the members and potential members believe in co-operative, rather than purely competitive, relationships and the extent to which Government and legislation encourage or prohibit joint activity. Thus, a trade association may be anything from an ineffective agency for the issuance of a largely unread news bulletin to a strong, well financed institution that actually regulates much of the relations among members. The logical basis for the trade association movement is an attempt, within the framework of the existing economic and political philosophy, to provide services and activities that individual members cannot create or that would be prohibitively costly to individual firms. The exchange of comparative operating statistics for efficiency measurement purposes is an illustration of the first type of service; the operation of an industrial research laboratory in an industry of small firms may be an example of the second type.

31. The association may provide these services themselves or they may engage outside contractors for the purpose; Governments may or may not subsidize the activities. European and British associations, in particular, have been interested in the development of joint, co-operative laboratory services. (78) Association officials and staff are often expected to provide a sort of "quick answer and information" service to members, an answer or a reference to an appropriate source of help in a short conversation, telephone call or letter. The major problems in the use of associations and other multi-firm organizations to help solve individual members' problems are these: (a) limitations on the resources available to all but the best financed groups; (b) an obvious need to avoid doing anything that gives one member a competitive advantage over another;

and (c) a similar need to avoid spending too much time on an individual's interests unless a fee is charged for the service, a practice that may encounter statutory or tax barriers. The opportunities for providing individualized advisory services may vary inversely with the members' size and the complexity of their problems, although very small firms are often reluctant to support a trade association that is not primarily engaged in political activity.

32. The development in many countries of management associations, societies for the advancement of management, and engineering associations will not, in most cases, provide a direct source for the analysis and solution of individual firm problems. These organizations will tend, however, to provide training courses and seminars, certain types of research, reference and information services, and encouragement for the growth of private consulting agencies. Even more fundamentally, they may be expected to help enhance the status and professionalization of management, often a basic step in the growth of industrialization.

33. Industrial extension services: Government-supported industrial extension services, modeled on the type of field work pioneered by agricultural extension agents, have been developed in a number of countries, such as the Scandinavian nations, Netherlands, Japan, India and Israel. These services may work independently of, or in co-operation with, existing trade associations. An ILO study, however, points out that businessmen are often likely to be more receptive to advice from an institution that is at least one step removed from direct governmental status, and are likely to be more interested in the institution when they have some ability to control its direction. (27) The study consequently suggests operation of the service through or in collaboration with the trade associations whenever this is a feasible alternative. The major problems that extension services face are: (a) recruiting, developing and maintaining a suitable staff under civil service or semi-civil service practices, particularly in view of the earning opportunities many capable industrial extension workers have in private employment; (b) securing acceptance for their services; (c) allocating effort between consultancy, information, training and research

work; and (d) allocating effort between potential clients, while avoiding any sort of competitive favoritism. Both the limitations on the amount of work that may be done for any client and the rules under which many such services are set up tend to inhibit work for very large enterprises, major public utilities, and national and quasi-national corporations. (27, 55)

34. Productivity centres: While productivity centres have a major function in providing training and demonstration courses for various levels of staff and line personnel, these centres also often undertake considerable research and other developmental work. This work frequently leads the centre into at least some forms of extension and advisory activity, in addition to the significant counselling effects that result from the specialized courses. Advisory activities may be conducted independently, or in some degree of collaboration or association with a development corporation, servicio, institute or bank, with an industrial extension service, with a university or autonomous engineering or management school, or with some other institution. (61) However, the position of the 1959 Bangalore Conference, that productivity centres must give the training of experts priority over any consultative activity, must be noted. (58)

35. Foreign Governments and multilateral agencies: Any discussion of advisory services in the developing nations must note the volume of such technical assistance provided, directly or through intermediaries, by other Governments, by the United Nations and its affiliated agencies, the Organization for Economic Co-operation and Development (OECD), and other regional groupings. Because of factors noted earlier, these assistance programmes are now placing increased reliance on the use of contract services. (10, 59) Nevertheless, for several reasons, the assisting organizations are likely to continue recruiting and detailing individual experts. Consulting and contract firms can provide access to only a portion of the people whose services are desired. Some, who are currently employed in multinational, national or subsidiary Government agencies, may encounter difficulty in arranging leaves of absence if the period is to be spent on the payroll of a private firm, regardless of how worth-while the activity may be. Others, in private employment, will face similar problems in trying to work for another firm. Some, who conceivably could be available through private firms, may

prefer public to private employment. Many of the experts who are wanted for technical assistance are located in countries where few consulting or contract organizations operate. It must be remembered that the developing nations are exporters and lenders, as well as importers and receivers, of expert talent. As will be noted later, the argument is sometimes advanced that technical assistance programmes should focus on the use of specialists from the developing economies because of their particular insights into development problems. Whether this argument is correct or not, or whether technical assistance should make use of ability wherever it is located, the fact remains that contract organizations will have only limited access to many people whose services are desired.

36. Even though the lines between "private" and "public" are becoming increasingly blurred throughout the world, the assistance of a public agency may be preferred to that of a private firm in some host countries because of ideological considerations. Finally, although the question needs much more research, an impression at least exists that direct governmental efforts are somewhat less costly than contract services. This impression might, or might not, remain under an accurate accounting that considered all implicit as well as explicit costs. A preliminary study conducted in 1957 for a committee of the United States Senate tentatively concluded that under appropriate arrangements and conditions there were no significant differences in cost between direct government employment and the use of private contractors in overseas technical assistance. But, so long as the impression of higher costs persists, it is likely to influence the choice of advisory arrangements. (72, 73)

The rise of consultancy

37. Many of the agencies described immediately above have been available within the industrialized nations, to the same or an even greater extent than in the developing ones. Yet, the tremendous growth of contract engineering and management consulting services in many of the industrialized countries provides some indication of the needs for, and the apparent benefits of, such services. The consulting firms that have emerged in response to those needs vary greatly in function, organization, size and nature. Most, but not all, small firms try to specialize in function, technique or clientele. Some large firms also seek to

concentrate. For example, Tavistock Institute in the United Kingdom is best known for the application of behavioural science insights and research to a wide range of problems, while Doxiadis Associates in Greece concentrates on urban planning and related questions. Some organizations, such as Battelle, Stanford Research Institute and Arthur D. Little in the United States, maintain elaborate industrial research facilities in addition to their on-site advisory and analytical activities. European and British management consulting firms have devoted considerably greater relative attention than most American firms have to the operation of formal short courses and training seminars for client-nominated personnel. (13) Consulting organizations also differ as to the relationships they expect to maintain with their clients. Some management engineering firms are prepared to set up and initially operate "turnkey" projects; others assume only an advisory role. Some see their function as exercising technical competence to analyse pre-set problems, while others claim an obligation to help determine the problem and its parameters. This diversity among organizations both eases and complicates the potential client's problem of choice, since, while it increases the number of alternatives, it also provides the opportunity for a more suitable selection.

38. Both the availability and the utilization of contract services has markedly increased in recent years in many European nations, in India, Japan, in some but by no means all Latin American countries, and in several other countries.

(13, 42, 74, 75) The greatest total use of contract services is found in the United States. The Bureau of the Census reports that in 1963, there were 1,540 independent research and development laboratory establishments with receipts somewhat over \$800 million, as well as almost 21,000 establishments in the business and management consulting services category (exclusive of advertising and public relations counsel) with receipts of \$1,200 million. (69, 70)

II. WHEN ARE CONTRACT SERVICES APPROPRIATE?

39. The use of contract engineers and advisers is often the best prescription when a firm or other organization has relatively short-run needs for combination of talents and/or facilities not readily available within its own staff or other appropriate and relevant agencies. As has been noted, contract organizations often enjoy an advantage over other sources and means of assistance in effectively and efficiently supplying teams of specialists, backstopping staff and equipment. But while this is an advantage, it does not spell out the only, or necessary, condition for the use of contractors. In many instances, the use of a contract arrangement to obtain the services of even one appropriate analyst, engineer or adviser may be most desirable. Moreover, the ability to provide teams is not a sufficient condition for the use of contract consultants, since in some instances the use of their services (or, for that matter, any services) may be inappropriate or wasteful.

40. What, then, can be said about the situations for which contract services are particularly suitable? The following notes probably do not outline all of the relevant considerations, but they may suggest some of the more important questions. These relate both to the problem and to the firm that is the object or recipient of consultancy.

The problem

41. Any problem to which contract services are directed should, of course, be important enough to warrant such attention. It should be a problem that for some reason is not susceptible to satisfactory internal solution. As indicated earlier, this does not mean that consultants should be used only when internal staff lacks the ability to solve the problem. For example, consultants may well be used when company staff are too busy to take on another assignment. However, these considerations are elementary and need not be spelled out in detail. It may be observed, however, that while most firms do not use consultants enough, once in a great while a firm will develop a sort of organizational hypochondria in which even trivial and unnecessary matters are referred to outside advisers.

42. A more perplexing issue concerns the kinds of questions that outsiders can best help to solve. Survey after survey shows that clients are most satisfied with the

results when advisers are retained to help handle very concrete, clearly delineated, pre-set problems. Thus, Ekey and Robbins report in their survey of Virginia manufacturers:

"... a high rate of 75 per cent satisfaction was reported when the consulting problem was well-defined and specific; whereas, a low rate of 25 per cent satisfaction was found to exist in the solution of broad-complex problems. Problems restricted to a specific department (i.e. production, marketing) had... the highest percentage of satisfaction." (15)

43. The results of this study may have been affected by the fact that the "high-pressure", small-business type of consultant who, the authors found, was responsible for much of the dissatisfaction, tends to sell a vague, ill-defined sort of management service rather than specific assistance. But many other writers feel the same need for defining and limiting problems. One, for example, holds that the more explicitly the assignment is defined, the better the consulting relationship will be, while another says: "Contractors are best used when the management problem is one of clearly definable size and scope...". (25, 36, 45, 47, 60)

44. Yet, many very competent consultants claim that one of their greatest services is in helping clients to perceive and define their problems. Even a man such as Wilson Soney, who is no advocate of excessive or indiscriminate use of consultants, says:

"Finally, it is important to retain an open mind about problem-definition even after a consultant has been retained. It is often advisable to arrange for a general or diagnostic survey by the consultant as a prelude to lengthy or complicated engagements. Important objectives of such studies are to verify that the tentative identification of the problem or the purpose of the study has been correct; to eliminate any conscious or unconscious bias that may have been built into the situation; and to contribute objectivity and experience of other situations to the current situation. In any event it is a rare engagement in which no change occurs in objectives, scope or nature from beginning to end.

...

"... the client who insists on his own definition of the problem does so at his own risk." (18)

45. These words take on extra significance from the fact that they are part of a study prepared for, and reviewed by, a member panel of the Financial Executives' Research Foundation, a comptrollers' group that also takes a conservative and restrained view on the purchase of outside services. Clearly, this sort of advice, which comes from many competent sources, appears to be in conflict with the survey results.

46. Part of the difference is a matter of semantics. One man may consider a question to be fairly well delineated at a stage when another man would still call it vague and ill defined. Consider the following set of statements concerning a corporate problem:

- (a) Our profit performance is inadequate;
- (b) Our profit is poor because our sales are falling off;
- (c) Our sales have fallen off because some of our old customers have stopped buying from us;
- (d) Some of our old customers have stopped buying from us because our delivery record is poor;
- (e) Our delivery record is poor because our production often runs behind schedule;
- (f) Our production runs behind schedule because we often run out of needed parts and supplies;
- (g) We run out of needed parts and supplies because we do not have a good stock-control system;
- (h) What we need is a punched-card stock-control system; or
- (i) The punched-card stock-control system that we need must have the following specifications as to cost, information delivery....

Statement (i) certainly defines the problem much more specifically and rigidly than statement (a). But the question at what intermediate level the problem might have been called "well defined" is a matter of judgement on which no two observers would necessarily agree.

47. Another source of the difference between the survey results and the advice lies in the problem of evaluating consultant services. As was noted earlier, it is much more difficult to tell whether a good job has been done when the assignment is broad and loosely defined. The client can easily slip into an under-evaluation of the consultant's contributions in such circumstances. On the other hand, the consultant, who normally likes to think of himself as more than a technician, may

over-value his contribution under the same circumstances. In contrast, performance on a very specific assignment is more readily observable and more easily measured.

48. The client's efforts to define the problem also indicate the extent to which he recognizes its existence and may suggest the extent to which he is prepared to co-operate with the consultant. In any event, if the requirements are not set at an impossible level, the consultant normally has a much easier task when the problem is precisely spelled out. Defining a problem is often the next thing to answering it. A specialist would have much less difficulty in responding to statement (i) in the list above than to statement (a), but ease of performance is not a measure of the importance of the task. Helping the client move from stage (a) to (i) and determining that (i) is the true problem may well be the consultant's real contribution. In the illustration above, further investigation might show that the failure of the existing system to note pending shortages of parts was merely a symptom of poor morale in the factory, or that the difficulties flowed from the production of an uneconomic variety of models. Improving the stock system under such circumstances would deal with the symptoms rather than with the basic issue.

49. Thus, while there is no debate about the desirability of having assignments set precisely and accurately when possible, considerable question exists about the appropriate stage of problem resolution in the real world, where problem definition may be the client's major difficulty.

50. Another question about the use of outside contractors concerns the nature of the task to be done. Is the job primarily one of analysing and advising, or is it primarily one of training counterparts and local specialists? Or is it one of actually conducting operations? All three types of tasks have been and are performed by various types of contractors, but the use of advisory experts for long-run operating tasks tends to be wasteful of their special advantages and resources. Consequently, one sort of problem definition that should be undertaken before outsiders are engaged is a determination of the role they will be expected to perform. This will often determine who is to be engaged.

The firm

51. The most basic prerequisite for a successful advisory assignment is a sincere desire for advice and help on the part of the client. Unless the firm or

organization being counselled really wants such assistance, very little is likely to be accomplished. References to the firm or organization in this context are, of course, vague since organizations contain many individuals who may have quite a variety of attitudes and desires. At a minimum, then, the desire to co-operate must exist at a level high enough to ensure the consultant's access to whatever records and information he needs, and high enough to see that the acceptable recommendations are implemented. In a development situation (and in most others as well), this usually means that top management must want the consultant. Lower-level co-operation is extremely desirable, since subordinate staff can sabotage or hamper the contractor's work if they want to do so. But top-level approval and co-operation is an absolute "must". Third parties (and subordinates) may be useful in persuading top management to use outside services, but those services usually cannot be thrust upon management successfully.

52. The desire to co-operate seems to have many dimensions. It includes a reasonable non-fatalistic optimism, a feeling that problems can be solved or ameliorated and operations improved through study and analysis. It includes recognition of the fact that the adviser may have to ask many questions, consume the time of many people, and have access to considerable information about past operations. It includes an awareness of the fact that improvement necessitates change, and that change may be uncomfortable, and it includes a willingness to bear that discomfort.

53. Along with the question of willingness to change, there is the matter of ability to change. External restraints, for example, may limit the client's ability to improve, regardless of how much it may want to do so. One commentator notes that government agencies have frequently brought in procurement advisers who have recommended purchasing practice changes that are totally unacceptable to the controlling legislature or cabinet. (52) Similarly, bringing in an expert on promotional procedures is an exercise in futility if civil service regulations, union rules or custom makes strict seniority promotion mandatory. The only value the consultant's report has in such instances is as an element in a long-run campaign to induce the controlling authority to change the ground rules.

54. There is also a limit on the amount of change an organization can absorb at one time. A firm or division that has just gone through a major reorganization

may not be ripe for further major change at the moment, although it may still be susceptible to improvement in details. A companion limitation exists on the number of consultants and change agents an organization can tolerate at a time. As noted, the use of consultants and outside specialists imposes demands on the firm. The specialists may need space and facilities but, more important, they also need executive time and attention. The amount of time and attention needed will vary with the contractors' tasks. If they are purely technicians and working on specialized problems, they will not impose the same demands as management consultants conducting a general audit of the firm's operations. In any event, the executives' capacities are a scarce resource that must be rationed, and some priorities must be imposed if several problems appear simultaneously.

55. Finally, the firm must have available, or be potentially able to secure, the staff, equipment and paraphernalia needed to support the consultant's work and implement his recommendations. For example, certain types of business analysis are out of the question until the appropriate historical accounting and cost records have been installed and maintained for some time. Similarly, there is little point in introducing a specialist to design a system or a production method that the staff will not be able to utilize. Even if the specialist's work is of some immediate benefit, as when an efficiency expert studies operations in a job machine shop, the real values of his work are lost unless trained people are on hand to continue and modify the recommended programme as the volume and nature of the work changes. In such instances, consultants might be requested to help instal the appropriate records or to assist in staff training, as an antecedent or accompaniment to the introduction of the analyst.

56. All of these considerations relating to the firm's absorptive capacity lead to an important consideration concerning the use of consultant services in economic development. The pattern in the industrialized nations, where the greatest volume of consultant use has occurred so far, shows that firms that employ outside advice and analysis most are, in a sense, the ones that need it least. Successful, growing, large firms are the ones most likely to call in outside advisory services and are probably the ones best prepared to appreciate their advice. A recent British study that looked at two groups of firms, designated "thrusters" and "sleepers" depending upon their growth behaviour and potential, noted that the

"sleepers" regarded consultants as charlatans and, at best, as sources of additional paper work. In contrast, the "thrusters" were fully aware of what consultants could do and considered consultancy an important means of helping the firm. (40, 46)

57. Much the same thing holds true in the United States and elsewhere. A survey of Greek industry recently reported that "only big private firms and state enterprises have used foreign know-how [in amounts] worth measuring". (39) Large firms, not small ones, form the Norwegian contract research institutes' most important customer group. (16) A great many exceptions to the rule have occurred, but in general large and progressive firms are the ones most receptive to outside advisory services.

58. This pattern of consultant use has developed under conditions of a relatively free market for contract services. This market, it is true, would be characterized by most economists as an "imperfect" one. Even in the most tightly knit industrial community, many buyers of such services are unaware of many potential suppliers, and suppliers are often unaware of opportunities to sell their services. Moreover, since these services are differentiated, personalized, unstandardized, and usually impossible to specify completely in advance, their market can have little of the classical impersonality of the wheat pit. Nevertheless, the pattern of usage described above has emerged from conditions in which clients are reasonably free to engage any adviser they wish, and consultants are free to work for any client who will have them.

59. This is not the place to debate the merits of large versus small firms in economic development, or the relations and tensions between freedom and planning. But it is evident that any government or development agency that wants to see a different pattern of consultant use will have to play a significant role in creating that pattern. In the long run, and most constructively, the demand may be altered through education and demonstration effects, as has occurred to some extent in agricultural extension. In the short run, however, since consultant services cannot be provided successfully to people who do not want them, any alteration of use patterns must involve the essentially negative step of rationing or imposing priorities on eligibility for services or on the funds for payment of such services. In imposing priorities, the controlling agency will have to face

up to the following questions: Should eligibility be determined by ability to use services in terms of the absolute gain or improvement per unit of contract input (something probably very close to the free market situation)? Or should services go to those who will have the greatest marginal rate of improvement - in a sense to those with the most serious problems? Or should eligibility be determined by some other criterion, such as the position of the industry or firm in the national development scheme?

60. In practice, the question of who gets what services will often be decided on an ad hoc basis. Parenthetically, much the same basis is used within firms in industrialized nations. The use of consultants is not often budgeted and programmed in the same way that research and development work is planned. Rather, the question of calling in an outsider is raised and resolved only as needs become apparent. But the question of priorities particularly arises explicitly or implicitly, when a Government or its development ministry decides to offer or foster advisory services. The question is very similar to those involved in planning educational facilities, since it boils down to the issue: Who should get what services?

III. SELECTION OF CONSULTANTS

61. Judging by the number of words written on the subject, the selection process is often considered to be the most difficult and serious problem in the use of contract advisers. In reality, it should not be so considered. Analysis of needs before the consultant is engaged, co-operation with him on the scene, and evaluation of his report, are fully as important as the selection of a particular individual or firm to do the work. Wasting fees on a consultant who turns in a worthless report may be a serious matter, but it cannot have as grave consequences as failing to evaluate the report and recognize its worthlessness.

62. Nevertheless, the selection steps take on added significance when the purchaser's funds are limited, or when the contractor's recommendations rest upon special technical skills that his client does not share. In such cases, there is less room for mistakes in selection. Thus, particular care must be exercised when developing-country clients choose contractors, especially if the choice will require scarce foreign exchange assets. At the same time, the problem of acquiring information about suitable contractors, always a difficulty, is compounded in the developing countries.

Information and rosters

63. Consultants and contract engineers have many means for making themselves known in the industrialized nations. The total number of technical, managerial and professional journals has increased greatly in recent years, and the number of conventions, professional meetings and seminars has grown at an even more rapid rate. Thus, any consultant or consulting organization with the slightest gift for discreet professional self-publicity has many opportunities to make itself known through articles, speeches and attendance at professional gatherings.

64. The number of professional and trade directories has also gained space to the point where there are now bibliographies and directories of directories. For example, the Guide to American Directories lists six reasonably current directories of management consultants, and at least twenty-five directories of engineers. (31) Other directories list testing laboratories, advertising agencies, contract marketing research firms, consulting industrial psychologists and so on. A similar

proliferation of directories and guide-books has occurred in other industrialized countries, and many lists of organizations for international service are also available. The International Guide to Directories on Resources in International Development of the Society for International Development includes several sources, such as the 1965 International Engineering Directory and United States Resources for Planning Assistance (AID), which provide names and some information about private contractors for development work. (53)

65. Yet, even where directories are readily at hand, businessmen complain that they have great difficulty in learning about available services. Part of the problem is that businessmen are not librarians, and many are unaware of existing directories. But the major problem is that these directories, at best, usually provide only a small fraction of the information the prospective client needs. Many of the rosters are too general and too inclusive to be of much use to prospective clients. A list of all the licensed or graduate engineers in an industrial nation, or a handbook that gives the names and addresses of everyone who has paid a few dollars to join an unrestricted professional society cannot be very helpful to someone who wants to start negotiations with a few selected firms. In contrast, the pioneer management consultancy associations in a few countries have set such restrictive or exclusive conditions for membership that their lists omit some of the most qualified and prominent suppliers of advisory services. But, whether too inclusive or too exclusive, the directories usually tell too little about the firm's performance record and suitability for the assignment. What seems to be needed is a sort of Michelin guide-book, with reasonably comprehensive listings and some indication of each consultant's specialities, capabilities and performance to date.

66. Merely mentioning the requirements, however, suggests the difficulties of providing such a guide-book. The problem of evaluating a consultant's services has already been discussed, but the problem of providing and maintaining an equitable system of grade labels - i.e., using one, two or three stars, or four crossed slide rules to rate the work of many different types of consultants from many different nations rendering different types of services in many other nations - is geometrically more difficult. The roster must be selective enough to be a useful reference source, but without monopolistic or exclusionary barriers

against capable new consultants. The sheer clerical and editorial work involved in compiling and maintaining such a list is imposing. The British Institute of Management once attempted a much less ambitious task in creating its Register of Management and Industrial Consultants, but even that task seems to have required more attention than the Institute was apparently able or willing to devote to it. (57) Another important question concerns the agency or institution that should be responsible for the roster if it were to be prepared. Should it be done by a private firm, a consortium of professional associations, or by some Government or multilateral agency? Might the work be divided on a national basis, either by country of service or, more likely, by country of origin? If so, how could uniformity and standardization be imposed on the national ratings?

Selection criteria

67. Type of consultant: An earlier section of this paper discussed the major categories of suppliers of advisory services. One point may be mentioned in addition to the earlier recitation of advantages and limitations. This is that the consultant's own training and orientation will influence his perception of the problem. A psychologist will tend to see one set of difficulties and avenues for improvement in a situation, where an engineer will tend to see another. Consequently, the choice of consultant, particularly if he is a specialist, will to some extent pre-determine the nature of the recommendations. This almost inevitable characteristic of consultancy is another reason why the potential client should be encouraged to think seriously about his problem, even if he cannot define it precisely, before and while negotiating for consultative services.

68. Size of the advisory firm: A question is sometimes raised as to whether large firms, small firms, or individuals should be preferred as suppliers of advisory services. In general, the question is trivial or irrelevant to the real issue, i.e., the quality of the advisers. Relatively large firms may be more readily able than small firms to undertake some tasks that require elaborate physical facilities, or that demand the services of a large multi-talented staff. On the other hand, the client is more likely to be assured of the services of principals if he deals with a small firm. At least nine times out of ten, the fundamental question is the ability and quality of the consulting firm, not its size.

69. Nationality of the advisory firm: Another somewhat extraneous question concerns the nationality of the advisory firm. This issue is expressed in different forms. Sometimes the client only wants advisers from the more developed countries. (67) Sometimes, the argument is that clients in small countries should draw upon contractors who come from other small countries. This argument holds that a man who has always lived in a country with relatively limited territorial expanse will tend to have a special appreciation of export and import needs and problems. (10) More often the argument is that firms in the developing nations should seek advisers from other developing countries because of their supposedly greater understanding of the requirements of working with limited capital resources and poorly trained labour. Sometimes, a hierarchy of development is proposed, with the suggestion that contractors in "A"-level countries work for clients in "B"-level areas, "B"-level nationals serve as contractors to "C"-level clients and so on. (2, 34)

70. To suggest that the issue is not an entirely valid one is not to deny that consulting teams from many developing nations have often rendered very valuable services in other developing economies. Twenty-seven per cent of all of the experts supplied under the expanded programme of technical assistance of the United Nations Development Programme in a particular year came from the developing countries. One Asian nation, for example, received 129 experts and supplied 130 in the same year. (66) Nor can it be denied that consultants from highly developed countries have at times recommended capital-intensive production techniques in totally inappropriate situations.

71. But the issue become insignificant in view of the facts that the supply of talent and skill in the world is limited and that wisdom, intelligence and experience exist irrespective of national boundaries. Consultants who can render good advice and those who render poor advice come from countries at all stages of development. The good ones should be selected from wherever they may be available.

72. Consultants and engineers do, of course, have some tendency to recommend and design in terms of the equipment and machinery with which they are familiar. Thus if exchange or other considerations dictate that the machinery for a given installation must be purchased in a particular country, the consulting engineers selected for the assignment should be ones who are familiar with that country's output.

73. A somewhat related geographical question arises when the work is primarily one of training, rather than of advising. Many training activities require a choice between conducting the programme in the trainees' country or the trainers'. Having the instructors come to the students usually reduces the number of persons who have to be transported, may reduce the expense and provides an opportunity to give the training in the environment where it will be used. On the other hand, sending the trainees abroad may provide access to a broader educational or industrial complex than could be made available at home, and may provide an opportunity to observe a whole set of attitudes and practices associated with industrialization. Language considerations and other such factors may then determine to which country the trainees will be sent.

74. Consultant's familiarity with local mores and language: Much current discussion stresses the extent to which the consultant should be familiar with the customs, traditions, practices and language of the area in which he is going to work. The case-books are filled with instances of technical advice that failed because it ignored local considerations. (19, 35) The requirements for awareness and sensitivity to such considerations will naturally vary with the assignment: an agricultural adviser may need to know more about local practices than a man who will design a turbine installation. A Ford Foundation official has prepared a gradation of roles, ranging from purely technical to technical statesman, calling for increasing elements of insight into the political, cultural and social aspects of the environment. (11) Nevertheless, much emphasis now seems to be placed on the attributes of environmental knowledge and sensitivity.

75. Without gainsaying the value of such attributes, it is also possible to recognize that they may be overemphasized. First, they may set up an impossible criterion. The world speaks with many tongues so that, at best, a technician will always have more language gaps than competencies. At any particular point in time the supply of available and unengaged consultants with some particular technical skill may not include anyone who is fluent in the relevant language. Second, the emphasis on the fact that each area or country "is different" may involve some erroneous and perhaps slightly derogatory conceptions about the skill, trainability or motivations of either the local labour force or the managerial and technical sector. (30, 54) Third, social scientists are

increasingly coming to realize that attitudes result from behaviour, as well as cause it. Thus, some supposed attitudinal obstacles to the utilization of techniques introduced from elsewhere may disappear once the techniques are introduced. (26) The fact that a large group of returned technical assistance experts reported feeling little need for cultural or other special preparation to work in a different environment is not conclusive evidence that they did not need such training. But it does suggest that emphasis on this sort of qualification may be carried to extremes. (24) Moreover, as discussed below in the section on working with consultants, techniques for dealing with cultural differences and preconceptions are available.

The selection process

76. The process of selecting contractors is much like the process of selecting employees. The more care and attention devoted to the choice, the greater is the likelihood of a satisfactory relationship. The more information that is obtained from and about the prospective adviser, the greater the likelihood of selecting an appropriate one. But the selection process also consumes time and money on the part of both the prospective client and the prospective advisers.

77. These remarks do not necessarily apply to local industry extension services and similar institutions. One of the great contributions of these institutions is that they often provide assistance under circumstances where no practicable alternative supplier is available. Another contribution is their work in making clients aware of their problems. But in accepting work from even these non-profit agencies, the client should not abdicate his responsibilities for deciding whether the work should be done, for controlling the relationship, and for evaluating the final recommendations. Clients negotiating with private contractors must, however, seek a balance between talking to too few and to too many prospects.

78. Government agencies and State enterprises sometimes put an assignment up for competitive bids in much the same fashion as they might buy X tons of steel rails. They often hope that this approach will secure an adequate number of prospective advisers, obtain the work at the lowest possible price, and avert the possibility of criticism or favouritism. But since advisory and contract services are so individualized and unstandardized, any procurement technique must be modified to

permit considerable negotiation and to permit purchase on the basis of potential service rather than on price alone.

79. Actually, all clients will find that the appropriate steps in the selection process are simple in concept, even though the execution requires judgement and common sense. Once the client has thought the problem through, as far as it can go, he should develop or review a list of possible suppliers. Rosters such as those discussed above may be used to the extent that they are available, and suggestions should be solicited from third parties who have used or are likely to be familiar with potential suppliers. The nature of the recommendations and review of the list will tend to narrow down the number of names under consideration.

80. Preliminary correspondence may well be initiated with a larger number of contractors than will be selected for final intensive review. The size of this initial list may be influenced by the amount of time available for choice and the likelihood that many of the consultants approached may decline the assignment.

81. Once detailed discussions are conducted with a consulting firm, the latter should be able to specify, in rather straightforward terms, what it expects to do, how it expects to do it, who will be working on the assignment, approximately how long they will be working on it, and at least something of the maximum and minimum costs of the job. Particular attention should be paid to the question of who will be the actual staff on the job, and not merely to the firm's over-all reputation. If a preliminary survey of the problem seems to be required, the firm should be able to indicate the approximate nature, duration and cost of the survey work.

82. Without violating rules of confidence, the consultant should be able to put the client in touch with others for whom he has rendered similar services in the past. These references should be checked, since sometimes a past client's opinion of a consultant is different from what the consultant thinks it is. Testimonial letters supplied by the consultant himself should be ignored or checked with the sources, since such letters are sometimes written as merely a polite formality at the end of an assignment.

83. The consultant's attitude, questions and insight provide an indication of his capabilities. An interview will also tend to reveal whether he will be compatible

to the client and his organization. As Seney points out, such qualities are usually much more important than experience in a particular trade or industry. (18) However, as one observer points out, "Overselling, price cutting, disparagement of competitors, extravagant promises and guarantees, and vagueness in approach during the presentation are danger signs." (22)

84. The prospective contractor's statements about his expected approach should culminate in a well-prepared written proposal. While there should be a fairly specific statement of what will be done and what will be the respective roles of consultant and client, room must also be available for adjustment if, as is often the case, the dimensions or nature of the problem change on deeper investigation. Again, the technical skill, soberness of judgement and depth of understanding demonstrated in the proposal are often a good guide to the presence or absence of those qualities in the consultant himself.

85. One serious complication arises, however, when the preceding selection steps are applied to the choice of engineers and consultants for engagements in the developing countries. This complication arises from the fact that many of these contractors must be imported from abroad. Hence, distance enormously increases the time and expense of the negotiating process. The problem seems to have no easy solution. Either selection is left to agents and third parties - at best, only partially satisfactory - or one set of parties must travel to the other. Often the assignment can only be surveyed on the site. Few contracting organizations, and particularly no individual, can afford many overseas trips in pursuit of contracts that may or may not materialize. In time, this contractual problem may be alleviated as more large organizations set up branch offices in more parts of the world and as local consultative services grow in the developing nations. But this is a long-run solution and in the interim the problem remains a most perplexing one.

IV. WORKING CONDITIONS AND RELATIONSHIPS

86. Government authorities and the advisees themselves can do many things that will affect the availability, quality and performance of contract engineering and advisory services. This section touches on some of these things.

A. Host country regulations

87. Legislation and administrative practices within the host country may create problems for the foreign contractor and may restrict the supply of advisory services. Some of the major questions that foreign contractors have to consider are: What, if any, are the costs, requirements for, and availability of entry visas, work permits and professional licenses? Is a local representative mandatory, must he be a national, and what are the requirements, if any, for his registration? What degree of local participation is required, and is there any formal or actual discrimination against foreign engineers? What local and national taxes are imposed on foreign consultants? May fees, profits and capital be converted or repatriated and, if so, subject to what restrictions? May necessary equipment be imported and, if so, will duty be waived or rebated upon re-export? And does the prevailing contract legislation create any difficulties concerning rights and liabilities, termination clauses, and the like? (71)

88. Foreign engineers and consultants have no inherent right to be a specially privileged enclave within the society in which they are working. They cannot expect general immunity from the duties and obligations imposed on all of the people around them. And particularly in those cases where the quality of the engineer's advice has implications for public safety, as in architectural and civil engineering, the Government has the responsibility of ensuring his competency.

89. But within this framework of obligations, much can be done to ease the way, and thus increase the supply, of competent advisers. The necessary regulations can be administered in an understanding and co-operative spirit. Professional competency can be assured without undue restrictions through reciprocal licensing agreements between nations with similar requirements, and through the recognition of foreign licenses even if reciprocal agreements have not been reached. Arrangements can be made to avoid or reduce double taxation.

90. Two basic considerations deserve as much attention as possible in all regulatory and legislative matters affecting imported advisory services. Expenditures on such services should be regarded as seed-money towards future productivity increases and exchange earnings. Therefore, funds and exchange should be made available as liberally as possible. Second, the local advisory and engineering groups should not be considered as an infant industry in need of tariff and embargo types of protection. The development, demonstration and educational work of competent advisers of all sorts, including imported ones, is exactly what is needed to develop further demand for advisory services. The extent to which local clients become accustomed to using such services, wherever they may originate, is what determines the market for the local consulting industry.

Governmental support of private advisory services

91. Governments also may play an important role in promoting, rather than hindering, the development of advisory services. The establishment of industrial extension agencies and the dispatch of individual employees as technical assistance experts are among the ways in which Government provides such services through its own staff. But it also may properly take a significant part in fostering and encouraging more autonomous and entirely private agencies. There are many situations in which businessmen are more receptive to help from non-governmental sources and in which independent entities can render more effective assistance.

92. Thus, Governments of both developing and developed countries have provided financial support for autonomous industrial research institutes. In many cases this support has included funds for capital expenditures and for at least a part of the institute's operating expenses. These funds may be drawn from the general national budget, from departmental accounts or, in some instances, partly from taxes, assessments or contributions paid by the relevant industries and trade associations. (16, 63, 78)

93. The Ceylon Institute of Scientific and Industrial Research (CISIR) is a successful example of such an institute. Established as a non-profit corporation, with control over its own affairs and with the right to work for

both private (fee-paying) and government clients, it began operations with five annual Government donations of Rs.1 million. Within seven years, CISIR was serving more than 400 enterprises and receiving annual fees of Rs.400,000 from private clients in addition to long-range research, government assistance, and technical information activities. The Institute has not been subsidized, except for tax exemption since 1962, and long before that it was entirely controlled and very largely staffed by Ceylonese. (21) The creation of such productivity centres is one of the ways in which a Government of a developing country can help to make advisory work available to its industrial sector. The establishment of extension services and the statutory authorization of industrial research associations are similar steps.

94. In other instances Governments and productivity centres will subsidize the use of private consultants. The China Productivity and Trade Centre (of the Republic of China), for example, employs consultants as well as its own staff to assist selected demonstration firms. In return, these firms are obliged to show their results to all interested parties. The Puerto Rican FOMENTO will hire consultants and split the cost with the client if its own staff cannot solve the problem in a developing industry. (29, 41) Perhaps more significantly, multilateral agencies and, to an even greater extent, assisting Governments are making use of private consultants under two types of basic arrangements. One is by employing the consulting or contract firm to do a particular job or to carry out a particular mission for the employing agency. The other is by providing the client organization in the developing country with funds for the employment of a consultant. In some cases, this second type of assistance has been subject to some restrictions or control - with respect to the nationality of the consultant employed, the right to receive copies of the consultant's report, or the practice of giving such assistance only for feasibility studies. In any event, it does have the very great advantage of making the consultant responsible to the organization or firm he is advising. (3, 76)

95. Governments of supplying countries may also underwrite private sales of advisory services to the developing countries or guarantee payments against convertibility risks, as they sometimes do in the case of physical product exports. (17, 68) Other uses of subsidy arrangements might well be explored.

Although these subsidies would present many control problems, some arrangement under which the public authorities of developing countries pay a portion of the fee in appropriate cases might well encourage the use, and help develop the supply of, competent competing technicians, management specialists and engineers.

M.L. Hoffman has suggested that Governments in the industrial nations might offer a bonus or payment to firms that maintain an expanded staff so that specialists could be seconded for development assignments as needed. (12)

96. In addition to direct and indirect subsidization, Governments and development ministries might consider several activities to facilitate and promote the use of consultancy services. One long-run step (discussed below in the section on educational development) is appropriate statutory recognition of engineering and managerial studies so that the industrial consultative professions can assume proper status and thus attract well qualified candidates. As a more immediate step, productivity centres and development agencies can publicize available services and encourage their use by the developing industries. Experience shows that considerable persuasion is usually needed before businessmen will make their initial use of consultancy. The public agencies also may be appropriate candidates for the maintenance of the consultancy rosters discussed above. Finally, the suggestion has been offered that some such agencies should try to build libraries of past consultant reports and feasibility studies, so as to make advisory knowledge cumulative. (1, 38, 39) Such a plan presents many problems, and certainly would not seem readily practicable when the consultants have been paid by private clients or have had access to privileged information. However, it might have applicability to studies done for government departments, productivity centres, semi-official trade associations and the like.

97. To summarize, government activities may either discourage or encourage the development of advisory services. A positive governmental role may involve the most basic step of creating a reasonably congenial climate for consultancy work. More active participation may range from the stage of circulating information about and encouraging the use of consultants to the stages of direct subsidization and provision of services. If a Government does assume any of these more active roles, the question arises as to the agency or agencies through which it should act. Many alternatives may be available, depending on the local situation, but many observers recommend that the agencies be as autonomous and businesslike as possible. (20, 50)

V. DEVELOPMENT OF LOCAL CONSULTING PROFESSIONS

98. The process of economic development itself is the one factor that, above all others, is likely to foster the development of a strong, indigenous consulting and advisory profession. As industry and commerce grow, there is an increase in status and career opportunities in the industrial fields. As a result, more and more individuals at increasing levels of skill and aptitude may be expected to prepare themselves for employment in these fields. While it is both inevitable and desirable that most of these persons will be drawn into staff and operating positions in the industrial organizations, some will find that their abilities, tastes and opportunities lead them to become consultants. In this way, an advisory profession will be created and encouraged as part of the natural order of things.

99. But, as pointed out repeatedly in the foregoing pages, consultants can be a causal factor and not merely a result of development. The supply of foreign consultants available to any nation is likely to be inadequate to the needs, inappropriate for some industries or situations and, in other obvious ways, unsatisfactory as a total and permanent solution to the country's requirements. For these reasons, the agencies concerned with economic advancement should take whatever concrete and overt steps they can to help create and promote local advisory resources, rather than simply to wait for those resources to flower. Some of the steps are quite roundabout and long-run in their effects; others are more immediate. But all of them come under the heading of actions designed:

- (a) to encourage talented and intelligent young men and women to become engineering and managerial specialists and, especially, consulting specialists;
- (b) to provide them with the necessary training; and (c) to enable them to practise under arrangements that are both professionally and economically satisfying. (37)

Incentive

100. One minimum requisite for the development of a worth-while consulting profession is the prospect of compensation that is at least reasonably competitive with what the engineers and analysts could earn in private and other

employment. In this connexion, compensation includes not only the earnings figure, in the sense of fees and salaries, but also fringe benefits and security elements such as pension rights and the assurance of steady earnings. Consultative work is often attractive to people with a risk-taking and entrepreneurial outlook who might well be willing to exchange some element of security for the prospect of higher earnings. Consequently, the total compensation packet in consulting does not have to have the same configuration and identical components that it might have in other employment. But on balance, the material rewards of consultancy must look attractive enough to draw the talents needed for such work.

101. This means that when a Government tries to staff or subsidize a consultancy or advisory extension service, it must consider the rewards that the people it wants to employ could obtain in alternative employment. This consideration, rather than the prevailing civil service scales, should govern the establishment of pay, rank and promotion policies. Setting up the advisory service as an autonomous or semi-autonomous body may be one way to obtain freedom to pay the necessary salaries. What a government can or should do to directly influence earnings in private practice for private clients is much less clear. However, in many developmental situations, government and semi-governmental corporations are likely to be among the major suppliers, subsidizers and purchasers of advisory services, and will therefore exercise considerable influence over the general level of compensation.

102. Thus, a conference group of the Organization for European Economic Co-operation concluded that "satisfactory remuneration comparable to that received for the same grade of work in private firms is most important" in retaining staff for advisory services. But the group went on to point out that money alone is not enough. "Independence and a certain amount of responsibility in the daily work, as well as sufficient opportunity for promotion, are considered absolutely necessary." (43) A good advisory officer is likely to be impatient if too many restrictions or too much red tape is imposed on his work. At the same time, he necessarily moves from one substantive problem to another. His duties can impose serious demands on his morale and psychological resources even when his clients are receptive to his advice. Moreover, in practice, he often has to deal with people who may be apathetic, suspicious or resentful of his suggestions and his intrusion into the

situation. The advisory officer is therefore likely to need and to deserve considerable support and recognition from his organization.

103. Of course, some attrition of staff from the advisory organization must be considered inevitable and may well be desirable. Something is probably wrong with the organization if clients do not try to hire away some of the staff. The Puerto Rican FOMENTO considers such "pirating" as a desirable means of insinuating modern managers into local industry, and now deliberately includes anticipation of a high departure rate in its own manpower plans. (32) Moreover, some departures will result from causes that the organization cannot control, such as health and family considerations. But the total complex of compensation, personnel and managerial policies within the organization should be designed to develop and retain a competent professional staff.

B. Indirect incentives

104. The less direct, but nevertheless important, steps that will help to enhance the advisory professions range from actions designed to legitimize and develop education for the professions, to actions that will affect the total ambiance of the professions themselves.

105. If engineering and management advice is to become a respectable and attractive career, the educational patterns that lead to such careers must be placed on a par with comparable fields of study. Degrees in management and engineering must receive the same statutory recognition and status as those in, say, economics or law. Chairs must be established in the appropriate subjects and in turn their faculties must have access to the same recognition and privileges as those in other disciplines.

106. The main effects of legitimization for management and engineering education will be to increase the supply and the competency of the young people who wish to pursue those curricula. But it will also have the side effect of enhancing the status of practitioners in those fields. Other steps that will increase the skills and the professional satisfaction of the practitioners include the encouragement of professional societies, journals, meetings and seminars, which provide a fruitful means for the exchange of ideas and information and are almost a necessity if the practitioners are to keep abreast of changes and constantly

sharpen their abilities. They also provide the type of satisfaction and inspiration that can only come from intra-professional discussion. The development of these means of communication will not only benefit those specialists who practise as consultants, but will be of even more help to those on government and private staffs. In fact, the long-run steps that lead to well developed and well informed advisory professions are likely to benefit both the users and the suppliers of consulting services, as well as to increase the use of such services.

107. Licensing is a much more debatable step towards improving professional standards and status. It may be used to ensure some minimum standard of competency. Licensing can perform this function best when the attribute to be measured is one of knowledge, rather than a matter of personality, motivation, judgement, or even skill in application. Licensing is sometimes advocated also as a means of providing prestige and status, although this use seems much less desirable. Unfortunately, licensing is often urged, explicitly or implicitly, as a way to restrict entry and thus to guarantee the present practitioners a semi-monopoly position. Since the problem is to increase, rather than to reduce, the supply of engineers and management advisers, such restrictive licensing should be avoided at all costs.

Training

108. Good basic, general programmes in business administration, management sciences, engineering, chemistry and other industrial research fields that are appropriate for the training of operating and staff personnel are also the appropriate core programmes for potential consultants. These basic programmes may have to be supplemented by special activities and experience, both to increase the consultant's supply of technical skills and to school him in the ability to function as an adviser. No single institution or type of training arrangement is likely to meet all of a nation's needs in this respect. Combinations of agencies are likely to be used, with the respective merits and drawbacks of each varying somewhat with the local situation.

109. Universities and higher technical institutes: These institutions, of course, will have to provide the basic degree courses. They may also offer a number of

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special courses, refresher programmes and training seminars. Some observers suggest that in most countries management and engineering institutes may function best outside the conventional universities because of the control that the traditional and innovation-resisting faculties have over curricula. Whether this is true will depend on the local situation, but if special institutes are created, they should be led as quickly as possible to rank on the university level.

110. Another question is the appropriate degree of dependence on foreign versus local institutions. This question has several dimensions. If several relatively small nations find that their needs for certain types of specialists are real but very limited, they may consider the joint establishment of a regional university or institute. But this solution presents problems of national interest. Consequently, a more practical answer may take the form of reciprocity and specialization among the respective universities of the nations concerned, with each offering training in selected specialities and with free student exchange among all of the institutions. (61)

111. Another decision has to be made as to whether schools in the developed countries will be used and, if so, whether for basic programmes or only for supplementary and graduate work. The answer obviously will depend on the extent to which local facilities can meet the needs. Some international exchange is always a desirable feature of higher education and should be encouraged. However, the best long-run solution is the creation of institutions within any nation where the demand and resources warrant. A further complication in the use of overseas facilities is the problem of the so-called "brain drain", i.e. the danger that the trainees will not return for practice in their homeland.

112. Some universities and other schools have experimented with ingenious arrangements for the development of skill in application as well as in the basic subject-matter. Management games, cases, internships in industry, practical problems and the like are among the many devices that have been used for this purpose. The International Labour Organisation has described programmes of Israel and the Netherlands in which students are temporarily attached to firms under the supervision of experienced consultants. (27) Another interesting programme has been developed co-operatively by the University of Ceara, Brazil, and the University of California at Los Angeles (UCLA) in the United States. Under this programme, a group of twenty Brazilian and United States nationals

spend a three-month term in Brazil's north-east development area in conjunction with a course. The group is divided into small bi-national teams that first interview local consumers, farmers and businessmen to ascertain opportunities and then plan local industries to meet those needs. As the plans mature, support is solicited from the development bank and from local investors. Several such businesses have already been established under this scheme, and the groups have gained considerable active field experience. (4)

113. Training within industry: Unfortunately, such supervised field training is always at least one step removed from experience gained as a regular staff employee or as a successful proprietor in private industry. The value of such experience can easily be overrated since a young man is likely to learn more from several years of consultancy work under proper supervision and direction than from repetitious performance of the same function in one firm or agency. Moreover, the supply of able specialists moving out of industry and into consultancy will be limited, particularly if the prevailing national practices, customs and compensation procedures are designed to encourage lifelong tenure with the same employer. Clients, on the other hand, are likely to want, or be impressed by, a record of successful performance as an employee or an owner even though the requisite attributes may be somewhat different from those needed in consulting practice.

114. This discrepancy between what the clients want and what the service has to offer is not easily reconciled. Occasionally, someone with the desired background may seek "greener pastures" in consultancy, or a vigorous older manager may look for a new challenge in advisory work. Such men may be recruited from their present firms. Some opportunities also may arise to place younger men for a year or two as interns with local or foreign concerns, and some concerted efforts might well be devoted by the appropriate organizations to increasing those opportunities. Nevertheless, the principal ways to overcome this sort of resistance to advisory services will be to present a record of successful performance in the service itself, arrangements that let the clients know that the younger men's recommendations are supervised by experienced consultants, and the maintenance of an appropriate, businesslike demeanour on the job.

115. The number of overseas internships that can be arranged with foreign management consulting firms will probably be quite limited. The confidential consultant-client relationship that obtains in management advisory situations is not normally conducive to the introduction of visiting inter-observers. However, there may be some instances in which a business consultancy intern can be placed as a counterpart if the foreign contractors come to his country. Somewhat better opportunities for internships may exist in purely engineering and physical science types of research. Some special opportunities for training may arise out of "sister" relationships between research institutes of developed and developing countries. (33)

116. Among the substitutes for internships are the various training courses that have been developed by many consulting firms, productivity centres, research institutes and administrative staff colleges. These courses are useful, as well, for refresher purposes and special training for more senior personnel. Some of these programmes have been especially designed for consultants and advisory staff. Included in this category are programmes developed by Oy Rastor AB (a non-profit consulting organization created jointly by several important segments of Finnish industry); a special course for Nigerian development officers conducted by Arthur D. Little, Inc.; the extension officers' course at the Hyderabad Small Industry Extension Training Institute; and the Japan Productivity Centre's extension course. (13, 27, 49) Other training seminars, such as those in work study methods, are often intended primarily for staff members in industrial firms, but are equally appropriate for consultants and contract advisers. The total number of such courses is far too great for listing here, but a good many interesting examples are cited in Training Managers Abroad. (13)

117. The OECD has prepared several directories of training opportunities, including its Catalogue of Social and Economic Development Training Institutes and Programmes (1965); a companion volume, Catalogue of Research Institutes and Programmes relating to Social and Economic Development; and a European directory, Inventory of Training Possibilities in Europe (1965). The Colombo Plan Bureau has published a lengthy Handbook of Training Facilities at the Technical Level in South and South-East Asia. Several other available directories list research institutes and development agencies that may undertake some training work. (53) Such training facilities should be utilized to the greatest degree possible.

Organization of the consulting profession

118. The organizational arrangements under which the consultants will practise once they have been trained will vary from environment to environment. Some may be in private practice, either as individuals or on the staffs of private firms. Others may work for industry associations, research institutes, productivity centres, extension services, and the like. There is no need to reiterate the special strengths and limitations of each of these institutional systems. However, one point to make is that each of these institutions should be regarded as mainly complementary to each other, rather than as simply competitive. The long-run choice need not be between having "type A" or "type B" consultative agencies. In the short run, there may be a problem of priorities, which should be explored fully. But in the long run, the existence of "type A" institutions will tend to help, rather than hinder, the development of "B", "C" and other services.

VI. A FINAL NOTE

119. Although contract and advisory services are only a part of the total complex of forces needed in industrial development, they can be a very significant source of assistance. However, it is very easy to forget that both the advice that consultants can provide and the efforts to develop consultancy services take time to flower. This complicates the evaluation process and can lead to disappointment if instantaneous miracles are anticipated. But the most promising aspect of advisory services echoes a point just made on the preceding page. Efforts to increase the wise use of advisory services, efforts to increase the supply of competent advisers, and efforts to supply facilitating services for the advisory professions are all likely to reinforce one another and to reinforce the national and international drive towards increased productivity.

ANNEX

BIBLIOGRAPHY

1. Almi, H. Foreign assistance in industrialization, Iranian experience. In Capital formation and investment in industry. Istanbul, Economic and Social Studies Conference Board, 1963.
2. Amuzegar, J. Foreign technical assistance; sense and nonsense. Social research (New York) v. 26, Autumn 1959.
3. Asher, R.E. In conclusion. (In his Development of the emerging countries: an agenda for research. Washington, Brookings Institution, 1962.)
4. Asimov, M. Project Brazil: a case study in micro planning. International development review (Washington) v. 6, June 1964.
5. Baranson, J. Transfer of technical knowledge by international corporations to developing economies. American economic review (Evanston, Ill.) v. 56, May 1966.
6. Beika, M. Industrial estates for small business in Japan. Kobe economic and business review (10th Annual report), 1963.
7. Boskey, S. Problems and practices of development banks. Washington, Johns Hopkins University Press for International Bank for Reconstruction and Development, 1959.
8. Bredo, W. Industrial estates; tool for industrialization. Glencoe, Ill., The Free Press, 1960.
9. Carlson, R.O. High noon in the research market place. Public opinion quarterly (Princeton, N.J.) v. 25, Fall 1961.
10. Carlson, S. Development economics and administration. Uppsala, The Institute of Business Studies, University of Uppsala, 1964.
11. Conference on Evaluation of Personnel Effectiveness in Overseas Technical Assistance Programs. New York, 28-29 January 1965, sponsored by The Carnegie Endowment for International Peace.
12. Development needs the businessman. Lloyd's bank review (London) N.S. No. 68, April 1963.
13. Dustan, J. and B. Mekanowitzky. Training managers abroad. New York, Council for International Progress in Management, 1960.

14. Eckhaus, R.E. Technological change in less developed areas. In Development of the emerging countries: an agenda for research, edited by R.E. Asher, Washington, Brookings Institution, 1962.
15. Ekey, D.C. and W.D. Robbins. The use of consultants by manufacturers. Richmond, Virginia, The University of Richmond, 1964.
16. Elsrud, O. Contract research institutes in Norway. Paris, Organization for Economic Co-operation and Development, 1965.
17. Eximbank will consider loans to assist U.S. technical service contractors expand overseas. International commerce (Washington) v. 70, 6 April 1964.
18. Financial Executives Research Foundation. Effective use of business consultants. New York, 1963.
19. Foster, R.J. Examples of cross-cultural problems encountered by American working overseas. Alexandria, Va., Human Resources Research Office, George Washington University, 1965.
20. Glick, P.N. The administration of technical assistance. Chicago, University of Chicago Press, 1957.
21. Godwin, F. The research institute as a key industrial development instrument. In Science, technology and development (United States papers prepared for the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Nations). Washington, Government Printing Office, 1963.
22. Gordon, W.C. Selecting marketing research services. (U.S. Small Business Administration, Management aids for small manufacturers No. 117). Washington, Government Printing Office, 1960.
23. Green, W.E. Case studies in management counseling of small manufacturers. University, Mississippi, Bureau of Business Research, University of Mississippi, 1963.
24. Guthrie, G.M. and R.E. Spencer. American professions and overseas technical assistance. University Park, Penn., Pennsylvania State University, 1965.
25. Guzzardi, W. Consultants: the men who came to dinner. Fortune (New York), v. 71, February 1965.
26. Hirschman, A. Obstacles to development: a classification and a vanishing act. Economic development and cultural change (Chicago, Ill.) v. 13, July 1965.

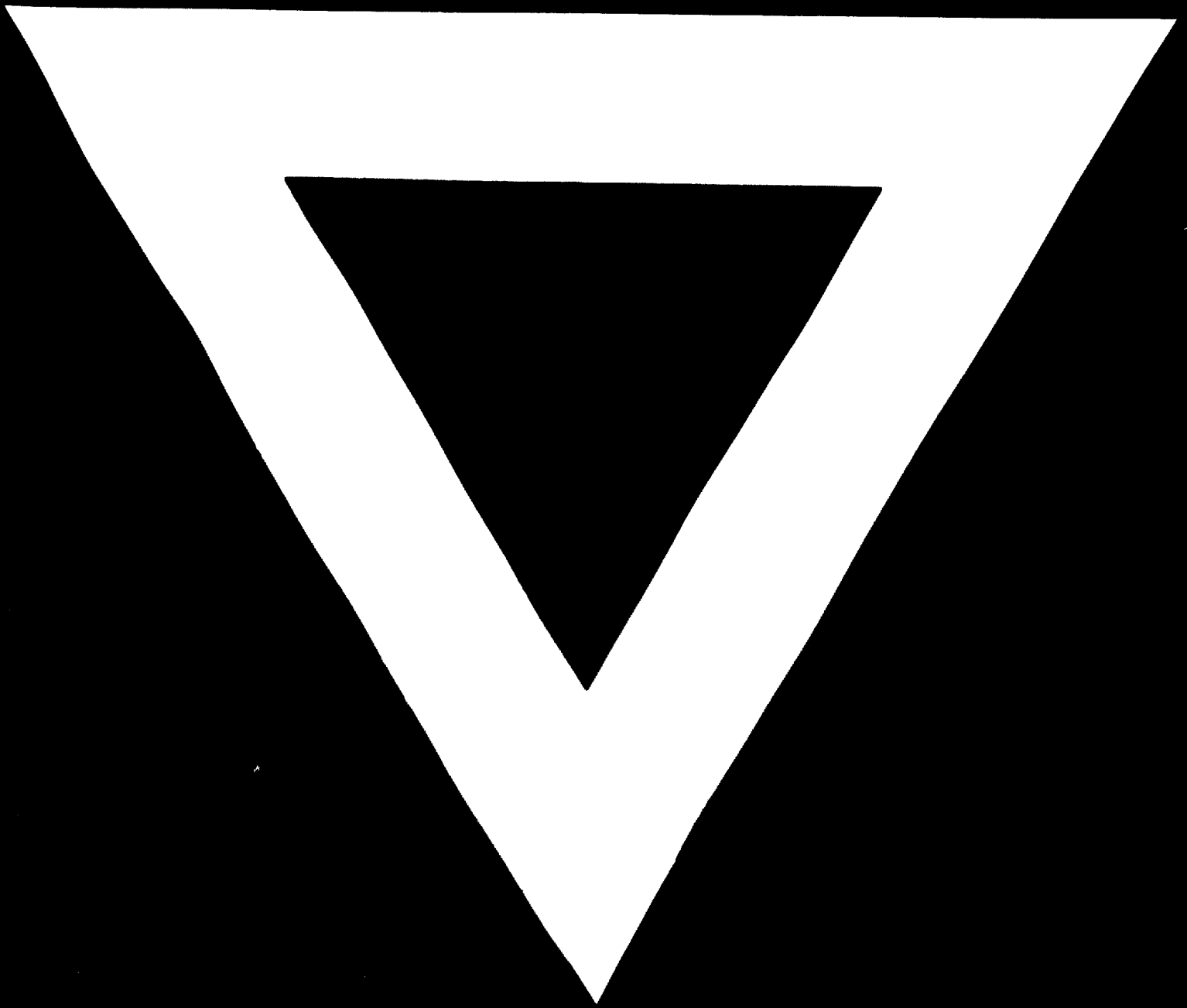
27. International Labour Office. Services for small-scale industry. Geneva, 1961.
28. Iwasa, Y. Characteristics of Japanese banking and the modernization of management. In Human progress through better management (CIOS XIII), International Management Congress, New York, Council for International Progress in Management, 1963.
29. Kao, Si-chin. Management improvement and productivity drive in Taiwan. In Human progress through better management (CIOS XIII) International Management Congress. New York, Council for International Progress in Management, 1963.
30. Kilby, P. African labour productivity reconsidered. Economic journal (Cambridge, England) v. 71, June 1961.
31. Klein, B. Guide to American directories. 6th edition. New York, McGraw-Hill, 1965.
32. Knowles, W.H. Manpower and education in Puerto Rico. In Manpower and education, by F. Harbison and C.A. Myers. New York, McGraw-Hill, 1965.
33. Krause, R.A. Role of a research institute. In Science, technology and development, v. ix, Scientific and technological policy, planning and organization. Washington, Government Printing Office, 1963.
34. Kreinin, M. Israel and Africa: a study in technical co-operation. New York, Praeger, 1964.
35. Lauterbach, A. Enterprise in Latin America. Ithica, New York, Cornell University Press, 1966.
36. Lawson, G. Technical co-operation for administrative improvement. Annals of the American Academy of Political and Social Science, No. 323, May 1959.
37. Littauer, S.B. Practical implementation of management sciences in industrially developing countries. In Management science in the emerging countries, by N. Barish and M. Verhulst. New York, Pergammon Press, 1965.
38. Maddison, A. Foreign Skills and technical assistance in economic development. Paris, Organization for Economic Co-operation and Development, 1965.
39. Maddison, A., A. Stavrianopoulos and B. Higgins. Foreign skills and technical assistance in Greek development. Paris, Organization for Economic Co-operation and Development, 1966.

40. Minding other people's business. *Economist* (London) v. 180, 11 August 1956.
41. Moscoso, T. Industrial development in Puerto Rico. In Methods of industrial development, by A. Winsemius and J.A. Pincus. Paris, Organization for Economic Co-operation and Development, 1962.
42. Myers, C.A. Management in India. In Management in the industrial world, by F. Harbison and C.A. Myers. New York, McGraw-Hill, 1959.
43. The organization of advisory services for handicrafts and small and medium sized firms in Europe. (EPA project No. 374). Paris, Organization for European Economic Co-operation, 1959.
44. Overseas Development Institute. British aid: survey and comments. London, 1963.
45. Peterson, R.C. How the consultant rates his worth to management. Controller (New York) v. 29, January 1961.
46. Political and Economic Planning. Thrusters and sleepers. London, Allen and Unwin, 1965.
47. Rawlins, E.W. How the air force uses management consultants. Harvard business review (Boston, Mass.) v. 35, July-August 1957.
48. Reynolds, L.G. Discussion. American economic review (Evanston, Ill.) v. 56, May 1966.
49. Riker, H.A. Training the government administrator for management of industrial development. International development review (Washington), June 1966.
50. Saraceno, P. Public enterprise in the market economy. In Methods of industrial development, edited by A. Winsemius and J.A. Pincus. Paris, Organization for Economic Co-operation and Development, 1962.
51. Schatz, S.P. Aiding Nigerian businessmen: the Yaba Industrial Estate. Nigerian journal of economic and social studies (Ibadan, Nigeria) v. 6, July 1964.
52. Smith, R.A. Consultation without revelation. Advanced management: quarterly journal (New York) v. 30, January 1965.
53. Society for International Development. International guide to directories on resources in International development. Washington, 1965.

54. Solo, R. The capacity to assimilate an advanced technology. American economic review (Evanston, Ill.) v. 56, May 1966.
55. Stepanek, J.E. Small industry advisory services. Glencoe, Ill., The Free Press, 1960.
56. Taggart, G.L. The university as a source of technical personnel. In Motivation and methods in development and foreign aid, edited by T. Geiger and L. Solomon. Washington, Society for International Development, 1964.
57. Tatham, J. The efficiency experts. London, Business Publications, 1964.
58. Technical meeting on problems of productivity improvement in certain countries, Bangalore, 1959. In Economic development, human skills and technical assistance, by R.S. Roberts, Paris, Librairie Minard, 1962.
59. Thorp, W.L. Development assistance efforts and policies, 1965 review. Paris, Organisation for Economic Co-operation and Development, 1965.
60. Tilles, S. Ideas for a better consultant-client relationship. Business horizons (Bloomington, Ind.) v. 6, Summer, 1963.
61. United Nations. Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas. Science and technology for development: report of the Conference. New York, 1963.
Sales No.: 63.I.28. 8 vols.
62. ————. Department of Economic and Social Affairs. Centre for Industrial Development. Industrial estates; policies, plans and progress; a comparative analysis of international experience. New York, 1966.
Sales No.: 66.II.B.16.
63. ————. Department of Economic and Social Affairs. Centre for Industrial Development. Manual on the management of industrial research institutes in developing countries. New York, 1966.
Sales No.: 66.II.B.3.
64. ————. Department of Economic and Social Affairs. Division of Industrial Development. Establishment of industrial estates in under-developed countries. New York, 1961.
Sales No.: 62.II.B.4.
65. ————. Department of Economic and Social Affairs. Division of Industrial Development. Industrial estates in Asia and the Far East. New York, 1962.
Sales No.: 62.II.B.5.

66. _____ . Office of Public Information. The United Nations family. New York, 1964.
Sales No.: 64.I.5.
67. _____ . Technical Assistance Board. Use of experts and training facilities provided by developing countries. New York, 1962.
(E/TAC/115).
68. U.S.A. Agency for International Development. Foreign aid through private initiative (report of the Advisory Committee on Private Enterprise in Foreign Aid). Washington, 1965.
69. _____ . Bureau of the Census. 1963 census of business: selected services; United States summary, (BC63 - SA1), Table 2. Washington, Government Printing Office, 1966.
70. _____ . Bureau of Internal Revenue. Statistics of income, 1962. Washington, Government Printing Office, 1965.
71. _____ . Business and Defense Services Administration. Engineers' overseas handbook. Washington, Government Printing Office, 1965.
72. _____ . Congress. Senate. Committee on Foreign Relations. Subcommittee on Technical Assistance Programs. Government utilization of private agencies in technical assistance (staff study No. 5). Washington, Government Printing Office, 1956.
73. _____ . Congress. Senate. Committee on Foreign Relations. Subcommittee on Technical Assistance Programs. The use of private contractors in foreign aid programs (A study prepared by Jerome Jacobson Associates). Washington, Government Printing Office, 1957.
74. White, J. German aid. London, Overseas Development Institute, 1964.
75. Wikstrom, W.S. Developing better managers; an eight nation study. New York, National Industrial Conference Board, 1961.
76. Williams, P. Technical assistance. London, Overseas Development Institute, 1964. (British aid, v. 4).
77. Winslow, A. The technical assistance expert. International development review (Washington) v. 4, September 1962.
78. Woodward, F.N. Structure of industrial research associations. Paris, Organization for Economic Co-operation and Development, 1965.





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