International Exchange of Management Information*
by Gustavo de Sá e Silva**

To meet the challenge set by the managerial gap, a world system of management information is proposed, under a broad concept, including research, education and documentation in management, and subject to a global, geocentric, strategy.

1. Introduction

The second half of this century may well go on record as one of the most bewildering and consequential periods in the history of mankind. With three decades yet to cover, the reported and proposed accomplishments of our scientists and technicians already are embarrassing many a teller of tales in the realm of science fiction.

Having set foot on the moon just a few months ago, man is already determined to start visiting the planets within the next fifteen years. The physicist proposes to understand and control gravity, matter, and antimatter. Biologists threaten us with ectogenetics, bionics, and eternal life. Social scientists prepare to organize underground and submarine cities. Chemists wonder at the risk of disclosing drugs which erase memories, change personalities and control the will.1

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No more than a negligible proportion of our generation, however, should expect to benefit from the technical advances of these days. It seems to be of the nature of historical discoveries and events that, by the time their fruits are plentiful and ripe, the pioneers have long left the face of the earth... The main reason for this slowness in the propagation of progress is certainly the greater toil met by man in understanding, controlling, and changing social circumstances than the rest of universal phenomena. As has been said, "it is harder to disintegrate a prejudice than an atom".2

To aggravate this difficulty further, the advances in techniques of mass communication spread the news of scientific discoveries, economic achievements, and political or social events ever more rapidly and widely. While technical knowledge tends to concentrate, both socially and geographically, factual knowledge seems to become more and more evenly distributed, among and within the nations.

Everyday finds a larger number of persons in the poor classes of the world who have become conscious of their economic marginality. As a matter of fact, never before has disappointment been so general as nowadays, when old and young generations from all social levels and quarters of the world raise their voices in condemnation of the status quo. Books such as The American Challenge3 and The Year 20004 — both translated and best-sellers in several countries — deserve some credit for the gloom that has invaded the minds of their readers, specially in the less developed nations. Kahn and Wiener's work inspired a nationally respected Brazilian economist to attempt to counterbalance its effects by writing a book called Brazil 2001.5 It starts with the following remarks:

"Every Brazilian, upon learning of the Hudson Institute's projections as contained in the book The Year 2000... feels disappointed with the low level of per capita income estimated for us by the end of the century... In absolute terms, we shall have made some progress: the 506 dollars of the end of the century represent 81% more than the 208 dollars per capita estimated for 1965... In relative terms,

4 KAHN, H., and WIENER, A. J. op. cit.
however, we shall be even more distant than today from the developed nations”.

The same reaction may be expected to have occurred in many other countries. The appalling, though bewildering, truth seems to be that if world’s poor, no matter how relatively defined, were counted from time to time, they would be found to constitute an increasing proportion of a global population which is steadily growing richer as a whole. Not even a complete check on the purposeless demographic explosion of the globe would be sufficient to eliminate this tendency!

This paper is devoted to the suggestion that leaders, educators, and students in the social sciences all over the world have a responsibility to pool, organize and coordinate resources so as to eliminate, or at least to reduce, the intensifying concentration of technology.

Reducing accumulation does not require reducing abundance, or even its growth. Japan is a dramatic example of a nation which continuously narrows its economic distance from richer ones, in spite of their persistently rising wealth. Education, research, austerity, and overall good management of resources, combined with a convenient rate of population growth, are some of the important variables that figured in elevating the rate of increase in Japan’s per capita income above those of other nations. At the same time, this greater acceleration is cutting down the distance between Japan and the most developed nations in the world.

Although not sufficient onto itself, an essential condition for stimulating economic growth in less developed nations is good management. This paper will attempt to demonstrate that less developed nations should assign managerial knowledge a high value in their development programs. It is up to us, leaders, educators, and students in business, to provide the spark which will draw and commit resources from the rich and poor nations into an international process of information exchange dedicated to spreading managerial knowledge over the world.

2. Importance of Managerial Knowledge

Any knowledge acquired by a group becomes part of its social capital. Its economic value is added to the economic value of machines, houses, etc. Like other kinds of goods, knowledge may be used: 1. to satisfy

6 SIMONSEN, op. cit., p. 11.
human needs directly; or 2. to produce other goods and services (including, possibly, further knowledge). Objective use of the latter — which could be referred to as productive knowledge — requires the assistance and assumes the presence of managerial knowledge. Economic development depends heavily upon good management in factories, stores, hotels, schools, government, and even homes. It follows as a matter of course that high priority should be assigned to the development, adaptation, and absorption of managerial knowledge by any nation, region, city, or other social group organized to achieve a defined goal and to optimize results from limited resources.

The importance of this cannot be overstressed. Let it suffice to quote from the opening remarks of the report which resulted from the feasibility study ordered by the Board of Governors of CIOS in 1966 to determine what could and should be done to organize an international exchange of management information and experience:

"Political and business leaders all over the world recognize the urgent need to accelerate the exchange of knowledge and experience in the art and science of managing, in order to improve standards of living in all nations. Effective managers are in shorter supply than either capital or technology. This shortage is the most serious bottleneck to economic growth and improved living standards." 7

That managerial knowledge is heavily concentrated in a few nations and badly needed in all of the others seems to be undisputed. Less commonly noticed is the new and vigorous demand for managerial knowledge about the many nations. This knowledge either does not exist or is not organized properly so as to meet the growing demand for it.

This new demand has a two fold nature: 1. in many countries, the demand for nationals with managerial skills is rising; and 2. the demand for environmental information about an even larger number of countries is also rising.

3. The Demand for Native Management

International and multinational business have, certainly, stimulated the demand for good management by nationals in many countries. As Neufeld observes:

“...Permanent differences between nations demand that international corporations learn to cope with diversity while yet achieving efficiency through careful planning, coordination, and control of world-wide operations. The problems posed by international diversity are reduced if nationals predominate in the operations of local subsidiary companies and if they are given maximum responsibility and authority for achieving the defined objectives of the parent company”.8

A recently reported study, which involved more than 500 executives from at least 17 countries and 20 firms, indicates that “executives of some of the world’s largest multinational firms have been able to identify a series of external and internal factors that contribute to or hinder the growth of geocentric attitudes and decision”.9 Because of the importance they have in the development of the argument, Professor Perlmutter’s definitions of the concepts of ethnocentric, polycentric, and geocentric attitudes are briefly quoted:

“Ethnocentric attitudes are revealed in the communication process where advice, counsel and directives flow from headquarters to subsidiary in a steady stream, bearing this message: This works at home; therefore, it must work in your country...”

“Polycentric firms are those which ... begin with the assumption that host-country cultures are different and that foreigners are difficult to understand... A polycentric firm, literally, is a loosely connected group with quasi — independent subsidiaries as centers more akin to a confederation”.

“The third attitude which is beginning to emerge at an accelerating rate is geocentrism... The ultimate goal of geocentrism is a world-wide approach in both headquarters and subsidiaries. The firm’s subsidiaries are thus neither satellites nor independent city states, but parts of a whole whose focus is world-wide objectives as well as local objectives, each part making its unique contribution with its unique competence... The international management team includes the affiliate heads”.10

The trend towards geocentrism indicates that the demand for good management increase in all centers of the world where international business is planning to operate. This increase will not only arise because of direct demand but also because of the demand of local business which will tend to be generated by new business practices.

4. The Demand for Environmental Knowledge

Universities in the most developed nations, particularly in the United States, as well as international and multinational corporations may be expected to exert growing demands for data and information involving and increasing number of countries and regions of the globe. This need will be met by research conducted either by nationals or by the organizations which require the information. It creates an additional opportunity for local research to develop and generate knowledge that may have value on the international scene.

The need of universities for this knowledge derives from "... the spectacular growth in student demand for international business courses..."11 as well as the interest of universities in serving international and multinational corporations.

That international and multinational corporations need such information is easy to understand. "The international business firm operates in a multiplicity of national and supranational environments, all of which are dynamic and in process of rapid change. Comparative studies of different institutions, cultures, legal systems, and policies towards business are helpful. But often such studies are snapshots at one point of time, or static pictures that are past history even when the studies are completed".12

Two primary needs make an organized international exchange of management information imperative: the need for actual managerial knowledge to flow from the most developed nations to the less developed nations; and the need for potential managerial knowledge to be generated and to flow from the less developed nations to the more developed ones.

5. The Flow of Managerial Knowledge

The idea of an international exchange of management information, as already suggested, assumes a two-way flow of management knowledge: if it is to be dedicated to the improvement of living standards in all nations, it must of necessity encompass a two-way flow of knowledge between the most developed and the least developed economies. The multinational scheme of exchange which is herein contemplated, therefore, assumes that each nation is, of can be, prepared to generate managerial knowledge of interest to other nations — and this to the extent that it wishes to receive knowledge from the outside.

Consequently, a System for the International Exchange for Management Information would have to be based on the willingness of participant nations to organize themselves not only to receive but also to provide information that might be relevant for management in other nations.

Two basic functions need be performed by the member nations to be involved in the exchange: the establishment of a national system of documentation to serve as a clearing-house in the international exchange of printed knowledge, teaching aids, and learning equipment; and the close cooperation of the national system of education and research with the national system of documentation as well as the local business communities, both domestic and foreign.

For a long time these functions have been urgently in want of coordination at the international level. When an international organization of the reputation and prestige of CIOS becomes concerned with the problem of management information exchange at this level, it is a good time to recall that, in the accumulation process, knowledge — and managerial knowledge for that matter — requires not only general access to printed information and teaching aids from all sources, but also, and particularly, a system of education and research organized so as to make the best and most efficient use of the documents and aids.

The problem of organizing an International Exchange of Management Information — with reference to printed material, teaching aids, and learning equipment — has been very well dealt with elsewhere.\(^{13}\) We propose to concentrate here on the educational and research problems.

\(^{13}\) CIOS, \textit{op. cit.}

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6. Education and Research for Management

The word *education*, as used herein, is intended to cover not only the formal education offered at institutions of higher learning but also training and development programs, whether conducted in such institutions, in training centers outside the universities, or within private firms themselves. The word *research*, on the other hand, refers not only to the efforts normally conducted in institutions of higher learning, but also those undertaken by specialized firms — or even directly by the interested firms themselves — which pertain to an improved understanding of the environment in which business takes place (market conditions, social parameters, legal constraints, economic trends, etc., etc.).

Considering, however, the more general problem at hand, namely, that of organizing the international flow of management knowledge, it seems appropriate to leave business firms out of the analysis. The business community is doubtless essential in the search and implementation of a solution for the problem: business leaders must be personally integrated in the process, and business firms certainly play an important role in helping to finance the project. Still, it cannot be expected that private concerns would have any interest in committing their training and research efforts to a national or international project.

The institutions that are left on the scene fall into two broad categories: universities and training centers. In Brazil, and apparently throughout Latin America, these two institutions tend to cooperate rather closely but informally. Although this may not be the case in other countries, it should be given serious consideration, because of its evident advantages.

Some institutions of higher learning which offer a formal education in business administration also conduct development and training courses for managers. Where this does not happen, many university faculty members frequently participate in training courses given by other organizations. Development and training courses are not important only to managers; they can contribute a good deal to the development of the faculty through a meaningful contact with practitioners.

In examining the merits of a formal education and training programs versus those of on-the-job training of business administrators, it may seem at first sight that this comparison is unnecessary. The indications
are clear, however, that in many less developed nations, the real need for a program in formal education has not been grasped, and in some of the more developed nations, active recognition does not seem to have gained general acceptance in spite of being quite well understood.

As is well-known, business administration started being taught in U. S. universities in the beginning of the century. Since the 1880's, a number of business courses were being conducted in a couple of U. S. institutions of higher learning. It was not before the First World War, however, that regular business curricula started gaining definite shape. It is surprising to notice that, outside of the United States, institutions of higher learning only started to offer comparable programs in the 1950's. In Brazil, for instance, as in many other nations, schools of commerce and schools of economics had been in existence since the 1930's. But the first school of business administration was not started until 1954. By the end of 1967, 31 schools or specific undergraduate programs in business administration were available in the country. Very few of them, however, would today meet internationally accepted academic standards in the field of business education, both in curriculum content and faculty educational background. Much the same pattern probably characterizes many other nations.

The problem of institution-building in the field of business education in Brazil was the subject of a very interesting monograph published by Michigan State University. Because it has been found to be similar to the problems faced by other Latin American countries, it deserves a brief summary.

In 1954, the Getulio Vargas Foundation founded the School of Business Administration in São Paulo — the first college-level institution in the field. This resulted from an agreement between the U. S. and Brazilian governments as a consequence of which Brazil was promised technical help in establishing the teaching of business administration at college-level.

The help consisted in maintaining in the school an U. S. mission and training young Brazilians in business administration graduate courses in the U. S. to take over the mission in time. The agreement, originally signed to last for four years, was renewed twice. The U. S. mission therefore remained at the school for twelve years. Through these years, the same conditions were extended to two universities in the country, where business administration programs of good quality still exist.

The technical assistance program probably came to an end a little too quickly. A graduate faculty, with a large enough number of doctors in the field of business administration, or the supporting social sciences, had not been formed and is only now being developed. Consequently, the country does not as yet have the minimum means of preparing and upgrading its own faculties in business administration. The large amount of managerial knowledge that has been provided from abroad during the past fifteen years is neither sufficient nor academically developed enough to be transferred adequately to the next generation. We are now desperately trying to form a nucleus of high-level scholars and researchers to establish a respectable doctoral program and engage in the same process again to form the faculties of other schools of business administration in the country.

This same situation is found in other Latin American countries. The Latin American Committee of Deans of Schools of Administration (CLADEA), the creation of which was inspired by the American Association of Collegiate Schools of Business (AACSB), has a membership of no more than 12 institutions from all of Latin America, including Mexico. All offer a master's degree and some a bachelor's degree in administration. None offers, or contemplates offering, in the near future, a doctor's degree in the field. Apparently, the situation in Canada, Asia, Africa, and Australia does not differ too much from this description.

Research and publications, on the other hand, tend to reflect the situation just described. In addition to the difficulties arising from the elusiveness of adequate resources for academic research, interest in research is generally lacking. Although exceptions are to be found, a man often tends to be more naturally inclined to participate in research activities only after completing a doctoral program of study.
If this is a reasonable description of the situation of the educational and research system in management for a large enough number of nations, it justifies a generalized treatment. This is what is proposed next.

7. A Geocentric Approach to the Problem

The geocentric tendency observed in international and multinational corporations to orient their decisions and resources according to a global strategy may serve as an inspiration in the search for a solution to the problem of creating a global system of management information exchange. This system would clearly have to be so structured as to facilitate the permanent flow of existing information and the permanent generation of new information.

Consequently, it would have to include continuous documentation, education, and research in all nations involved.

Perhaps an international organization, such as the United Nations, would best be fitted to take responsibility for such a program. No matter where located, however, it should be thought of as a network of participating institutions in different countries, or economic regions, committed to follow a world policy in the development of local knowledge and human resources — especially educators, researchers, and technicians in management.

The geocentric criterion should be dominant in selecting such institutions. Human and technical resources from the most developed nations should be hired by the world center at headquarters and distributed in a few carefully selected regional centers of the globe with the objective of developing in each center a nucleus of high-level educators and researchers as well as a documentation center and a university school of business administration.

Experience indicates that these institutions should preferably operate outside of universities, if flexibility and agility in reacting to changes in the environment are desired. They should, in any event, be well endowed and able to retain a proper nucleus of educators and researchers with full-time dedication. Outside private consulting for educators and researchers in management is feasible and desirable so long as their loyalty to education and research is not impaired by such activities.
Local bachelor's, master's, and doctor's programs and degrees should be made available by these regional centers as soon as possible. Educators and researchers might be brought from other countries to the programs just so long as their participation would be eventually reduced to becoming nonessential in a few years or to their joining the local institution permanently.

In a second phase, when these institutions have reached maturity, each regional center would act within its region in the same manner as the world center had developed regional centers.

The first consequence of such a program would be that the need for the preparation of scholars outside the country, or the region would be considerably reduced after the first phase had been completed. Where this effort is financed with local resources, it would mean saving a considerable amount of hard currency.

Secondly, it would soon raise local academic standards to the level of good international institutions and thereby would attract the interest of students as well as international and local supporting agencies to retain within the region people who are now being consistently sent abroad for training.

Thirdly, it would stimulate, both directly and through the availability of resources previously used in training abroad, a surge of research and publication in the field of management. This would ultimately generate the new managerial knowledge from within the region, or country, to serve in the process of further stimulating the international exchange of management information.

Fourthly, it would generate a much more rapid, consistent, and meaningful process for spreading the knowledge of management over the region or nation. It could be expected to form a regionally meaningful body of massive information of high quality for the objective solution of many other problems related to local and regional use of resources.

The economies that could be obtained through a plan of action of this sort are not easy to overestimate. The cost of sending a Brazilian trainee, with wife and two children, to a doctoral degree program in an U.S. university exceeds $40,000. This normally assumes that his previous preparation was comparable to a master's degree. A younger man, with wife and no child, costs a total of roughly $25,000 to obtain
master's degree. The same degree would cost a total of some $7,000 if the course were taken at the São Paulo School of Business Administration. These figures include travel and full salaries while the trainee is studying.

The School of Business Administration in São Paulo is contemplating this course of action for the development and upgrading of its own faculty as well as the faculties of other institutions of higher learning in business administration in Brazil. It has already signed agreements with ten Brazilian schools or universities, aiming at offering a master's degree to selected members of their faculties. This project is being conducted and developed without help of any sort. Participant's tuition and fees are waived, provided their institutions pay for the national travel and maintain their salaries while they are taking the course. If we could offer them a maintenance allowance while in such a large center as São Paulo, we should largely increase the number of interested candidates. If we could collect tuition and fees, we should be able to accept more of them.

8. Specific Recommendations

To sum up what has been said in a proposition for a practical course of action, the following recommendations are advanced as a first contribution for debate and decision if considered worthy of it:

1. that CIOS undertakes to complement the feasibility study ordered in 1966 with the objective of delineating a more detailed program for action:

a) to create an international center, probably under the United Nations Organization, to stimulate and organize the flow of management information among the nations;

b) to consider, among the responsibilities of such center, to organize 1. the flow of documental information and 2. the planned development of business education and research in the world on a geocentric basis, such as described above;

2. that the CIOS delegations present at the 15th International Management Congress be invited to approach the governments of their respective countries with the purpose of obtaining formal support for the plan at the international level;

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3. that the United Nations Organization be approached and consulted as to its interest in giving support and taking responsibility for the supervision of said plan along the lines herein proposed;

4. that these results be reported to the 16th International Management Congress with the expectation, if the whole plan in found realistic, of taking active steps towards its final implementation.

The nature and relevance of the problem of international information flow certainly may be said to be claiming for faster action than is being herein proposed. Unfortunately, some basic issues are at stake and the whole idea of a central intelligence with command over education resources for different nations will probably find a hard time being accepted, perhaps even considered. International integration is probably one of the most fertile grounds for innovation among the living issues of our generation. The establishment of change in international relations, however, requires determination and perseverance. It is one more chance for this generation to teach its posterity that the demolition of prejudice is feasible, hard as it may be...