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Keynote Paper

By

Syed A Rahim
EWC-AMIC RESEARCH WORKSHOP

The Computer and Information Development in ASEAN
March 27-30, 1984, Singapore

KEYNOTE PAPER
by
Dr. Syed A. Rahim

The Institute of Culture and Communication
East West Center
Honolulu, Hawaii
Mr. Chairman, Ladies and Gentlemen:

It is a great pleasure and honor to address this distinguished gathering of scholars and experts from ASEAN countries. I extend my deep appreciation to all of you for your cooperation and help in making this workshop possible. I am looking forward to learning much from your deliberations. I hope that by the end of the workshop all of us will have a clearer and better understanding of the nature, trends, and problems of computerization in ASEAN countries. We should be able to obtain a sharper focus on specific problems of ASEAN computerization that require more critical study and analysis. We should aim for collaborative research activities and more intensive exchange of knowledge and information among ASEAN researchers and practitioners concerned with computerization and information development.

A general review of computers and information development in ASEAN countries is presented in my working paper distributed to you earlier. My presentation today will supplement the working paper by raising some additional questions for your consideration.

I think that the main question for our workshop can be simply stated as follows: In ASEAN countries, what are we doing with computers, and what are the computers doing to us?

We limit the scope of this question to the area of information processing and information development, so that the topic remain manageable for this short workshop and we can address the major issues in this important area of computerization. We don't have a good descriptive answer to the question raised above. With some
hard work and cooperation from you, we might be able to generate materials for a good descriptive report. But, we should be able to do more than that.

I suggest that the social meaning of computerization, and the significance of computer penetration in ASEAN society need to be examined and interpreted in terms of the common patterns of computer use and the norms and rules that govern such usage. We must dig deeper to discover the pragmatic meaning of computerization, the nature of conflicts and contradictions generated by the invasion of a powerful and changing technology, by the juxtaposition of different rules, conventions and habits of informational activities, and by the different expectations of different groups of people using computers and computer-based information systems.

In the ASEAN countries, about 80% of the computers are in the private sector. Most of the computer installations are located in the metropolitan cities. The small number of personal and home computers are also concentrated in the cities. Obviously, the expansion of business and trade, the growth of urbanization, and industrial development are closely related to computerization. The use of computers in business is mainly dictated by national and international market conditions—competition, market promotion, search for high value-added industry and trade, and the calculus of labor costs and efficiency. There is a great deal of uncertainty in the market place. It forces the business enterprise to invest in computerization. In theory, computerization is essential for reducing uncertainty, and
thereby gaining advantage in competition.

The rationale for computer use in the public sector is somewhat different. Here, the administrative and political considerations are more important. The issues are more complex, and therefore, computerization is more problematic.

The personal use of computers at home and for recreational activities are determined by professional work, income management and entertainment needs. Recent development in micro computers has turned this into an important area of computerization. But, for the Asean countries there may be some difficult social and moral questions involved in the kind of computerization aimed at space-age entertainment.

The patterns of computer use are different in these three areas, because the needs are different. To what extent national computerization policy and programs take into consideration those differential needs, and how specific are the actions in meeting those needs? I hope this question will receive your attention for a critical discussion at the workshop.

The design of a computer-based information system, as developed by experts, is strictly logical in form and structure. Usually, it is superimposed on an existing organization which perhaps evolved over a long period of time with its own established norms and practices, which may not be so logical. So, we face the familiar problem of lack of fit, manifested in resistance to change, inefficient use of the computer system, dissatisfaction with work situation, conflicts between various groups and departments, customer complaints, and putting all the blame on the computer people.
The optimist technocrat might consider this problem as transitional; putting pressure on people to change and educating them about computers would take care of the problem. But the problem is much more complex than that. Recent studies in the United States and Europe suggest that computerization may lead to a net loss of jobs, may promote working conditions (repetitive short cycle operations) that cause loss of self esteem of many workers, and may encourage a high degree of control by management of the workers. All these factors may create serious political and social problems for society, even if an individual enterprise may greatly improve its productivity.

We need not assume that the Asean countries will face the same problems as faced in the U.S.A. and Europe. But, we need to address these questions relating to the computers and human conditions, and analyze them in the Asean context.

The computer is coming out of the closet. It's moving out from the exclusive back-office to the front-office. It's becoming a modern cultural artifact touching our lives in many ways. For this reason, the issue of computerization can't be any longer treated as only a technical or economic issue. The problem of computerization is as much a cultural problem as an economic or technological problem.

What kinds of cultural conflicts are generated by the process of computerization? What kinds of cultural symbolism is promoted by the computer? These questions are now being raised everywhere.

We get some indication of the cultural meaning of computers as promoted by the manufacturers when we look at various computer
related advertisements. A recent IBM computer advertisement says, "When you get behind the keyboard of the IBM personal computer, hold onto your hat. It's responsive on short trip. It's reliable on long hauls. And it's passing a lot of the others already on the road." Speed, power, reliability, simplicity, uniqueness, modernity and similar values are promoted by computer advertisements. There is very little sex appeal in computer ads. The main value promoted is power, the power of information.

What about the computer users? Do they feel the same way as the computer advertisements try to make them feel? I suppose that most users, especially those who are new in the game, seldom experience any surge of power when they struggle with the computer. If not a feeling of helplessness, an uncertain confusion is perhaps the most common experience.

The point which I am trying to make is that there are serious cultural implications of computerization. To understand them we need to examine specific kinds of cultural conflicts created by computers. A comparison, of the specific ways in which the case for computerization is publicly made, and the actual experience of computer users, will throw much light on this problem.

Computer education is one of the fundamental cultural issues. We can identify at least three distinct levels at which the computer education problems should be dealt with.

The idea of information as a societal resource, distinct but related to the material and energy resources, and its centrality in modern society, is very important. A basic understanding of the process of production, reproduction, storage and distribution of information in society, and the role of computer as a powerful
modern means of those activities, is essential for any educated person of tomorrow in our society. Our formal education system as a whole can’t ignore incorporating this at all levels—elementary, secondary and higher education.

Basic practical computer education for anyone who wants to use computers for simple tasks based on packaged programs should be available as widely as possible. This is the area of mass education through the mass media and various community activities.

Finally, what about the area of specialized education on computer and information sciences, introductory and higher levels? I think that this should be available from secondary level upward for students interested in the field of information.

What is the status of computer education in ASEAN countries? What are the major problems in this area? How are the problems handled at the policy and project levels with what results? These are important questions for discussion in our workshop.

The computer literacy and education problem is closely related to the computer languages. The language issue is a critical one because of its effects on every aspect of computerization. I am referring particularly to the language of the keyboard, the monitor and the printer—the language of reading and writing through the computer. At present this is the English language. It limits computer access to a small number of ASEAN people who know English. This is probably the most serious problem from the cultural point of view, if we consider computerization as a long range national program. Many other cultural problems of computerization such as resistance to change, loss of values,
inaction, suspicion and antagonism are rooted into the problem of language.

How are the Asean countries dealing with this fundamental problem? What is being done to modify or innovate hardware and software so that the national language can take its proper place in the drive for computerization? To what extent are the foreign manufacturers responsive to this problem? What market conditions need to be satisfied? What should be the proper role of government on this matter?

With these sets of questions placed before you let me conclude my presentation. I wish now to get down with you to the real tasks of the workshop—discussion, analysis and an assessment of critical research problems on computerization and information development in Asean countries.

I thank you very much.