

IMPROVING STRUCTURE AND PERFORMANCE IN THE THAI COMPUTERIZED BUSINESS ORGANIZATION

Watana Patanapongse

1. INTRODUCTION

The world is becoming more and more computerized - the more so as it becomes globalized. Globalization and computerization are correlated since, without computerized information and communications technology, how could the members of this world community communicate one with another?

For long work was performed in traditional organizations without the help of computerized technologies. Since their advent the management systems of both the manufacturing and the service sectors have gained in effectiveness and productivity. It can be said that, since computerized technology has come to play its part, organizational performance has improved, qualitatively and quantitatively.

This rapid growth of computerized technology is a development of which it is imperative that business organizations, especially those in newly industrialized countries such as Thailand, should become aware. Without this technology, what would organizational management be doing today? This technology can help optimize the human capability of the organization. Necessarily, management organizations in Thailand must recognize this fact, and highlight the importance of effective planning to develop personnel and an executive lifestyle for the computerized business organization, and the positive gains to be expected in the larger organizational context.

Planning began in Thailand with the First National Economic Development Plan (1961-1966). Now, the country has concluded its Seventh National Economic and Social Development Plan (1992-1996), and launched the Eighth Plan (1997-2001) in October of 1996. The commencement of the First Plan, in

• Research Center, National Institute of Development Administration

1961, initiated a government policy that every state enterprise should have set up a corporate plan by 1984. To ensure that the policy would be implemented successfully, the government ordered relevant agencies, such as the National Budget Office, to organize a policy seminar on "Alternatives for Corporate Planning" for March 30, 1984. At the Seminar, one lecturer, Dr. Issara Suwannabol, presented his "Handbook for Corporate Planning" (Suwannabol, 1984), which has since been a reference book for every state enterprise in Thailand when the time came for that enterprise to prepare its own corporate plan.

Private business organizations in Thailand already had corporate plans in place before any public or state enterprise, but there is little information about them. It is widely considered that they were used only by foreign organizations and Thai/overseas joint venture corporations, and it is not easy to obtain data on these private corporations. It is known that some Thai companies have started to develop corporate plans, possibly because the present atmosphere of business competition has motivated them to do so in order to promote more efficient performance and productivity.

The way now for the executive to achieve corporate goals and objectives is the way to optimum performance in the computerized organization. To reach corporate goals one must acquire a theoretical and practical understanding of how the desired quality of organizational behavior is developed, now and for the future. One must achieve an enhanced awareness of positive changes in personal, interpersonal and group behavior within the organization, and a knowledge base from which to more effectively direct these changes. These are not easy tasks for the executive to manage.

2. THE CHANGING PATTERN OF EXECUTIVE LIFE IN THAI ORGANIZATIONS

We may describe the world of today as becoming "globalized" - to express a trend to which every country on the planet's surface is having to adjust. And so it is with Thai executives: they are facing the problems of adopting and adapting to changing ways of organizational behavior.

There are five areas especially in which Thai organizations are facing change:

(1) In Management Information Systems

In the past, Thai executives did not pay much attention to information in relation to decision making. This was a consequence of the fact that they did not have any strong competition to fight. In the public sector, government executives did not feel any necessity to make decisions on the basis of up-to-date information. When a decision affecting management performance was made, any information was that which was near at hand, from whoever was nearby.

Hence, nowadays, Thai executives must adjust a great deal - to make appropriate decisions they must know how to apply information. Moreover, to use information means to invest. So far, few of them invest in information. Most still are content with secondary data and information to hand within the organization. Only a few business organizations are concerned to look for primary facts and information of use in decision making. However, the influence of globalization is now forcing Thai executives to invest in their own primary information systems and to attach more importance to information management. The more the world becomes globalized the more up-to-date, accurate and adequate the information must be. Otherwise, new competitors, stronger than any in the past, will take over their stake in the business arena.

(2) In resource management

Neither did Thai executives in the past pay much attention to resource management. Resources were abundant in an agricultural country with much low cost human labour. But now wages and salaries are rising higher and higher. During the past few decades, Thai workers have gone abroad in search of jobs in the United States, Japan and the Middle East; while, at the same time, in consequence of the growing cost of the Thai workforce, there is an influx of workers from the neighboring countries of Cambodia, Myanmar, Laos and China.

Thai executives now have to learn how to minimize costs. In the past many business organizations, holding monopolies in markets most of which were far from

conditions of perfect competition, could set prices for their products independently. But today, Thailand's markets are much nearer perfect competition and it can no longer be an executive's policy just to step up the price of a product at will. Rather, prices must decrease if the producer is to compete with other organizations.

(3) The Changing Pattern of Process Management

In the past, Thai executives did not face any problems of work procedure or staging of work. Organizational structure at that time seems simple by comparison with today. The situation has changed. Globalization demands that Thai business organizations become more sophisticated. An executive can no longer rely on common sense alone. Rather, in the environment of a modern organization, executives must have recourse to a growing management knowledge base. At least once per quarter, they now find themselves having to participate in some seminar or training course. Consultant companies whose business is running these seminars and training courses are growing fast. Thai executives are present with increasing frequency.

Nonetheless, they continue to face problems over improvement of the work process. In this field they have had little previous experience. In the elementary business organizations of the past, working style was guided by common sense rather than by management theories and models. Now executives must learn about reengineering, ISO-9000, TQM and many other matters concerned with work process improvement. Moreover, whatever technique of management is used, it must have as its basis reliable information.

(4) The Changing Pattern of Performance Evaluation

Neither did Thai executives in the past have much experience of performance appraisal or evaluation by management. In small organizations, where there was familiarity with past work performance, it was not of much concern.

In some Thai business organizations, supervisors do now appraise the work performance of their subordinates. However the future of an employee comes to depend more on the supervisor's approval than on efficiency or quality of work. In contrast, for a more systematic style of work evaluation, we can cite the Japanese

organization Toshiba. This has three dimensions: (1) Self-evaluation by the employee, (2) Evaluation by the employee's colleagues, and (3) Evaluation by the employee's supervisor.

Otherwise, work performance evaluation by business organizations in Thailand is still not very common. Some have conducted none over a long period, for reasons both of limitations of budget and lack of interest. However, executives must now give greater attention to work performance evaluation if they are not to be overridden by competitors.

(5) Restructuring of Thai Business Organizations for the 21st Century

The traditional Thai pattern of organizational interaction is one of individualism. What Embree (1950: 181-193) called a "loosely-structured social system" is a fact, and Thai organizational interaction is a consequence – it relies on individual relationships rather than formal principles.

In Thailand, the influence of the prevailing Thai cultural pattern dominates the administrative structure. The administrative structure in itself appears up-to-date and meets, more or less, international standards. Thus problems of interaction in contemporary Thai organizations do not arise from the administrative, but from the cultural, background. To make clear the similarities and dissimilarities between the two, we may refer to Table 1.

Table 1. The Thai Administrative and Cultural Systems in Comparison

Item	Administrative Structure	Cultural Structure
1. Principle	1. Depends on principles and reasons	1. Depends on individuals (individualism)
2. Organization	2. Efficiency, effectiveness and economy	2. Preference for fun, wastefulness, avoidance of hard work
3. System	3. Merit system (ability, equality, neutrality, stability)	3. Patronage system (security and individual interests)

Item	Administrative Structure	Cultural Structure
4. Performance	1. Law, regulations, meeting criteria	1. Individualistic (independent)
5. Control	2. Technique	2. Moderation (middle way)
6. Evaluation	3. Result-oriented	3. Master- and authority-oriented
7. Relationship	4. Formal	4. Preference for personal relationships
8. Authority	5. Separation of authority from personal concerns	5. Authority not separated from personal concerns: personal influence utilized

After considering Table 1, one may well expect conflict between the administrative and cultural systems. Though the administrative system seems to have developed, in reality it is still under the influence of the cultural system. In Thailand, the year 1994 was designated the Year for Promotion of Thai Culture. From the point of view of business organization, one may hope that it was not the more negative aspects of the cultural pattern that were promoted!

Normally, the culture or way of life of a society changes slowly, It is capable of gradual improvement. It is hoped that, with a deeper understanding of organizational behavior, Thai executives, especially at the policy-making level, will improve on and replace undesirable behavior patterns in the near future - at least to some extent - even following the Year for Promotion of Thai Culture.

In a recent article Schermerhorn (1997) maintains that, in the present economic crisis, Thai managers must look to all ways of regaining high performance. High performance in an individual requires ability, effort and a supportive environment. Managers in Thailand, as elsewhere, are apt to blame poor performance on employees' lack of ability or effort rather than on lack of support. Getting employees with ability is a matter of proper selection and adequate training on the job. There is no lack of advice in the literature on how to "motivate" workers to achieve greater effort. However, whether or not to work hard is a

decision for the individual. The most a manager can do is to try to create conditions where the decision is more likely to be positive: Without support individuals will not achieve the highest performance.

Support is not difficult to define. Employees in Thailand require adequate resources, clear goals, freedom from unnecessary rules and constraints, appropriate technology, and performance feedback. Managers must know what jobs need to be done and the needs of the people doing them. With ability and support, the feeling of competency to perform the job grows - and this is the strongest motivation to work well. Schermerhorn suggests that this approach can become part of a national strategy for productivity development, to help mobilize Thailand's human resources for future gains.

With a view to adapting Thai organizational behavior to the computerized organizations of the coming 21'st century, the year 1995 in Thailand was named the Year of Information Technology - in acknowledgment of the Thai Government's awareness of the importance of information technology to management, if the modern Thai organization is to survive in today's competitive world.

Technological developments are bringing about vast changes in the way that information is handled and used in organizations. The expected four-fold increase in the number of office personal computers, to some 46 million, by the year 2000 (Dreyfuss, 1988: 78-82), will offer to managers the opportunity to have increasingly more and better information at their fingertips. But to make use of this opportunity requires a clear understanding of computer-based information systems (CBISs) and their characteristics. The technological sophistication notwithstanding, the basic principles are simple, and not unfamiliar.

It is helpful first to make a distinction between "data" and "information." The difference between data and information is as important for managers as it is for computer professionals. From the point of view of the CBIS user, data are unanalyzed facts and figures. Information is data that has been analyzed, correlated and processed and presented in a form that is meaningful to the user, the decision maker (Bartol and Martin, 1994: 593).

For example, the record of sale of a single item on a supermarket cash register – linked to a central computer system – is a piece of data. On its own it is of little interest to management. But the processing of many such pieces of data by the central computer will produce inventory figures which are of great interest to the personnel concerned with purchase, delivery and stocking. Otherwise processed, the data will yield information on sales, on a day-to-day or week-to-week basis, which will be utilized in managerial decision making at various levels.

Today the processing of data into information is computer based – it is electronic data processing (EDP); and the major computer-related function in an organization that performs it may be variously referred to as an EDP department, management information system, or simply information system or information service (Gordon and Olson, 1985).

To obtain the information needed for their various purposes, organizations must not only develop a CBIS, but redesign themselves in accordance with the system.

A CBIS is defined by Laudon and Laudon (1991) as “a set of procedures designed to collect (or retrieve), process, store, and disseminate information to support planning, decision making, coordination and control.” These authors distinguish five major types of CBIS, serving the needs of differing organizational levels:

1) Transaction Processing Systems (TPS) execute and record the routine daily transactions required to conduct an organization’s business. They are used in highly structured, repetitive situations, such as retail sales transactions or withdrawals from a bank account. A TPS provides direct assistance at the operational level. Moreover, since the system is directly involved in the interaction with customers and suppliers, it plays a vital role in the interfacing between the organization and its environment.

In electronic data interchange (EDI), for which widely recognized technical standards have been established, specially formulated documents, such as purchase orders and shipping invoices, can be sent directly from the computer of one company to the computer of another.

2) Office Automation Systems (OAS) facilitate communication and increase productivity of managers and office personnel through document and message processing. The earliest to appear were the word processors which allow rapid creation, editing and printing of text. More recently, electronic mail systems are making possible the high speed exchange of written messages through computerized information networks. There are many variations on these systems.

OAS allow the automation of tasks that have long been recognized as those of the office worker; and, initially, they were seen primarily as a means of increasing the productivity of clerical and secretarial staff. It is now coming to be realized that they equally well facilitate the work of managers and professional workers (Finn, 1983; McLeod, 1986).

3) Management Information Systems (MIS) typically allow on-line access to current and historical information and summarize information originating from TPS to produce the kind of routine and exception reports required by middle level and first line managers and supervisors. They are aimed at tactical and operational applications, as in planning, decision making and control.

For example, materials requirements planning systems provide information to master schedulers on materials procurement difficulties, to capacity planners on any needed short or long term capacity changes, and to first and middle level managers on costs, quality and supplier activities.

4) Decision Support Systems (DSS) support the process of managerial decision making in relatively unstructured situations. They provide means for clarifying the analysis of a situation where there may be no one single answer or optimum decision.

As compared with MIS, DSS provide more advanced analysis and greater access to a variety of models that can be applied to a given situation; they make more use of information from external sources, in addition to the internal sources of TPS and MIS; and they are more interactive, allowing direct communication between the manager and the controlling program, allowing results of various analyses to be obtained almost immediately.

5) Executive Support Systems (ESS) or Executive Information Systems (EIS) are a fairly recent development intended to support decision making at the top levels of organizational management (Watson et al., 1991: 13-30). They differ from the more narrowly focussed DSS in using a wider variety of computing facilities, telecommunications and display options - for instance charts and graphs - applicable to many different problems. The ESS makes less use of analytical models, delivers information from a variety of sources on demand and allows highly interactive questioning. An ESS is essentially an information system geared to the needs, and often to the individual work habits, of an executive working in a particular situation.

3. CORPORATE PLANNING FOR OPTIMIZATION AS THE KEY TO ORGANIZATIONAL EFFECTIVENESS

It was suggested earlier that Thailand's experience of corporate planning is limited. National planning was inaugurated with the 1'st National Economic Development Plan of 1961-1966. In the social and political environment of 1961, Thailand's economy was that of an undeveloped country. The majority of the population were agriculturists. There was an abundant unskilled workforce. Per capita income was low. However, natural resources were large and the environment was relatively undisturbed. Political control was centralized in Bangkok. The world was moving from a world of westernization to one of internationalization. Moreover, the world was divided between two camps: capitalism and communism, between which Thailand chose to place its confidence in capitalism. In concept and character the 1'st Plan was: (1) determined by the paradigm of development widely accepted at the time, to the effect that "development" meant economic development; and hence: (2) had the acceleration and expansion of the economy as its single objective, (3) used a top-down planning strategy, (4) in project and planning analysis stressed a strategy of investment in economic and social infrastructure, and (5) emphasized the accumulation of material capital assets.

At the commencement of the 2'nd Plan (1967-1971), Thailand's economic, social and political environment had changed little over the period of the

preceding five years. The 2nd Plan: (1) still stressed economic growth, but began to hint at the importance of distributing growth to the regional areas, especially the Northeast, (2) still looked on social development as a means to enhance economic development, paying close attention to national workforce planning, and (3) distributed planning for any development project between sectors according to a sectoral analysis.

At the time of the 3rd Plan (1972-1976), politics was still centralized and the economic stability of the country was beginning to be affected by the first oil crisis. The 3rd Plan: (1) continued to stress economic expansion, but with an eye to maintaining financial stability, and (2) began to talk of social development, for the first time formulating a demographic policy, though only from the point of view of decreasing the birth rate.

The 4th Plan (1977-1981) faced serious problems of political instability following the October 14, 1973 crisis, of unfair income distribution, of natural resources, and of the environment. The 4th Plan: (1) in consequence of the uncertain political situation, stressed problem analysis, policy formulation and alternative solutions to significant problems, and (2) from its problem analysis, concluded that it was necessary to set multiple development objectives.

At the commencement of the 5th Plan (1982-1986), the political situation was becoming more stable, but the international economy was beginning to decline following the second oil crisis. The 5th Plan: (1) stressed stabilization of economic expansion, (2) began to direct project planning into the areas of rural development and the Eastern Seaboard, and (3) though planning was still top-down, began to delegate planning tasks to local regions.

With the 6th Plan (1987-1991), Thailand faced the effects of the international economic crisis, as well as many local economic and social problems. The 6th Plan: (1) now stressed both economic and social concerns, (2) divided its planning into a total of 10 programs, and (3) began to take more interest in the bottom-up approach to planning, as well as giving more importance to the improvement of management standards and reviewing the role of the public sector in national development.

At the start of the 7th Plan (1992–1996), the political system was embracing democracy. Most policy makers were elected. Moreover, the world was entering the age of globalization. The trend seemed to be to democratize: human rights and the environment were given wide and increasing attention. The Soviet Union and socialism were in a state of collapse. The 7th Plan: (1) began to recognize the necessity of formulating a sustainable development policy, and (2) classified development objectives into three categories, aiming for an equilibrium between economic growth, income distribution and the development of human resources, quality of life and the environment.

As the 8th Plan (1997–2001) takes over, the world will enter the 21st century. More than ever, it must take on the disequilibrium between economic, social and environmental development. The 8th Plan will: (1) aim for real sustainable development, taking human development as its single objective, and (2) delegate administrative, managerial and planning tasks downward, in order that every level of organization will have a greater chance to participate in plan formulation (EconNews, 1995: 15–19).

This summary of Thailand's national development plans brings us to the present and illustrates a trend that also applies to planning for optimally effective performance in the computerized organization in Thailand. The formulation of the 8th Plan differs in an important way from that of its predecessors. All the previous seven plans originated with the National Economic and Social Development Board, attached to the Office of the Prime Minister – they are NESDB's plans. But the 8th Plan is to be a truly national plan. Representatives of all sectors and professions will contribute. On March 3–4, 1995, 1500 participants met at the Ambassador City Jomtien Hotel, Pattaya, to criticize the draft plan and make suggestions for inclusion. It is hoped that with this expertise, every sector and profession will restructure and adapt its organization in accordance with the plan, while the plan itself will have taken into consideration and adapted itself to the changing patterns of Thai social systems and of the economic, social and political environment.

4. A PREREQUISITE FOR EFFECTIVE PLANNING

Ackoff's (1981) typology of planning provides a provocative and useful way of understanding the planning process and why it is often difficult for organizations to understand their own needs for transformation. Ackoff suggests that there are four different approaches to planning: (1) Reactive, planning in response to past events, (2) Inactive, going with the present trend, (3) Proactive, preparing for the future, and (4) Proactive, designing the future and bringing it about - which is the author's preferred approach.

Of these four approaches, the most challenging and demanding is proactive or interactive planning, in which the organization has faith that its actions can shape the future. Proactive planning is based on the view that the future is not preordained or predetermined, and hence that organizations can shape their own future. Hamel and Prahalad (1989: 63-76) term this approach "leveraging resources." It involves focusing on the question: What must the organization do differently in the future? The author believes that - though an organization will need to respond to opportunities and threats beyond its control - shaping the future can be an interactive effort, whereby the organization can proactively create the best of all possible futures.

A dramatic example is provided by Proctor and Gamble, a well known and established consumer product supplier, which for years had prided itself on its market research - its ability to ascertain the needs of the market and develop products to meet them. It was on this basis that Proctor and Gamble developed and placed on the market Pampers, the disposable diapers, after decades of market research had revealed that soiled diapers were a major source of discontent to young mothers. The disposable diaper business is now on the scale of three billion dollars worldwide. This was an example of not merely predicting the future and preparing for it, but of developing and marketing a product that significantly affected the business future.

Most organizations are capable of this kind of proactive planning, requiring the vision to perceive and meet unmet consumer needs, but the vision is not easy to

develop. It involves developing the ability to adopt, at least temporarily, a different frame of mind from that required merely to handle the everyday operational problems of the organization. The viewpoint can hardly be better expressed than by John Scully, CEO of Apple Computer, when he stated: "More than anything, we believe that the best way to predict the future is to invent it. We feel the confidence to shape our destiny" (Scully and Byrne, 198: 297).

Schein (1994: 125-139) observes that organizations of today must increasingly learn to adapt to a rapidly changing technological, economic, political and sociocultural environment. This requires more than minor adjustments. It requires genuinely innovative ideas: new missions, goals, products, services and processes, even new values and assumptions. An organization must learn to manage constant change. The problem is that organizations tend to be designed with an eye to stabilization and routine, to be self-perpetuating systems that allow new generations of members to take over without having to reinvent the organization every time. How then can one reconcile continuity with constant innovation?

Schein suggests that innovation may become part of organizational culture, and moreover that only organizations with such "innovative cultures" will fully utilize the strategic potential held out by information technology. The question then is: What kind of cultural assumptions will increase the likelihood that an organization will learn, adapt and innovate? Schein suggests the following:

1. Members assume that they can influence, change and manage at least some aspects of their environment; and that progress and innovation are possible and necessary.
2. Members are optimistic, proactive and oriented towards problem solving and improvement.
3. When complex decisions are to be made regarding uncertain futures, members will be prepared to experiment, break with tradition, try out new things, and take risks, rather than rely on rules and authority.

4. Members are oriented towards the near future; and use medium-length time units, long enough to allow an innovation to develop but not too long for it to be evaluated.

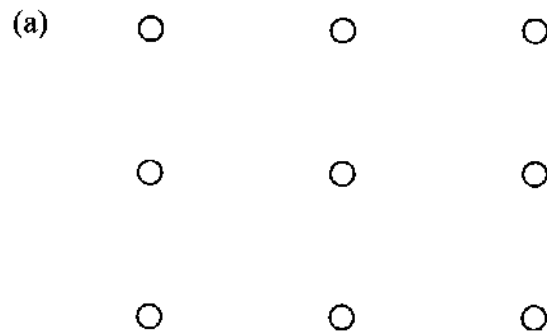
5. Members hold an optimistic view of human nature, as embodied in McGregor's "Theory Y" (McGregor, 1960), and believe themselves and others capable of growth and development.

6. Members pursue the ideal of individualism and individual diversity. In such an organization, participative decision making is more likely to identify areas for innovation and stimulate creativity.

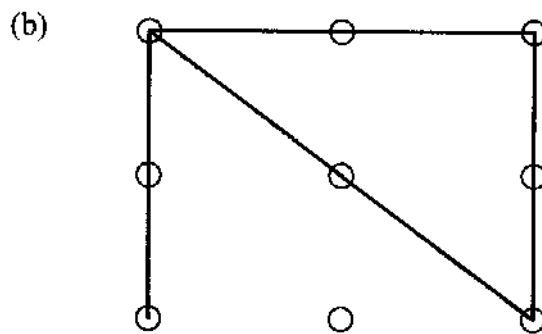
7. Members accept and encourage diverse but connected subcultures among themselves.

A prerequisite to effective planning is envisioning. However, the idea of envisioning a future that necessarily involves discontinuity and change commonly meets with resistance – the familiar resistance to change. Barker (1989) suggests that the existence of paradigms – commonly accepted sets of beliefs that bound thinking and set guidelines for problem solving within these boundaries – constitutes a further reason why many people will not accept new ideas. The “nine dot” problem (Figure 1) illustrates a case where the solution requires breaking with a paradigm – the tacit assumption many people make that the rules do not permit one to move outside the boundary of the nine dots. On being shown the solution, the subjects may protest that we did not “tell” them that it was permissible to go outside the nine dots. Envisioning requires a willingness to move outside the paradigm of familiar assumptions – often not an easy thing to do.

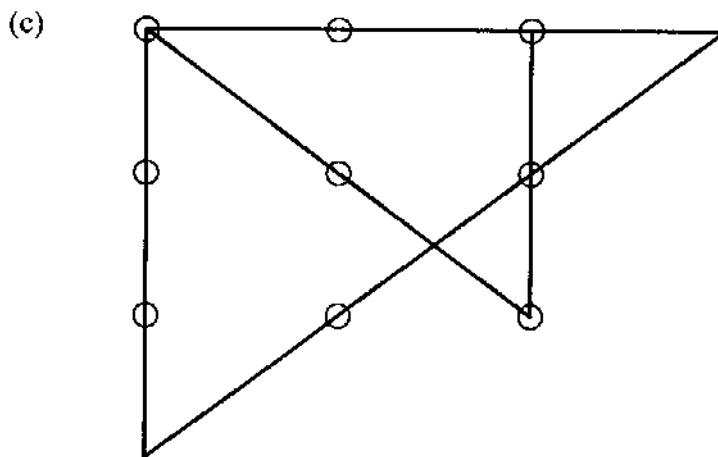
Figure 1. The Nine-Dot Problem



(a) The task: connect the nine dots with four straight lines, without lifting the pen or pencil from the paper.



(b) A typical unsuccessful attempt.



(c) A successful solution.

Prevailing paradigms serve to filter out information and observations that conflict with the “prevailing wisdom.” American automobile manufacturers apparently cannot believe that Americans could ever change their allegiance from the indifferent quality, gas guzzling, big car to its small, high quality, energy efficient Japanese rival – in spite of all the data that challenges their existing paradigm. Disturbing data is ignored, manipulated or uncritically rejected – what Barker refers to as the “paradigm effect.”

Successful envisioning challenges the prevailing paradigm. It asks, for instance “What should you be doing in your organization that you aren’t doing today?” The story of Xerox is a case in point (Hamel and Prahalad, 1989: 63–76). Xerox’s initial success came from the manufacture of high end copiers, distributed under lease from Xerox together with a service contract, necessary because of the complexity and difficulty of repairing the machines. The challenge came from Canon, who developed smaller, simpler machines that allowed every office to have its own copier, requiring little or no service. While Xerox continued within its old paradigm it was unable to meet the Japanese challenge. Not until Xerox redesigned its machines so that they did all that Canon and others did, at a more economical price, did Xerox again take the lead in the copier industry.

In the strategic planning process, envisioning enables the leaders of an organization to make a paradigm shift where necessary, to become receptive to new ideas, and to understand and accept the need and opportunity for change.

Tapscott and Caston (1993) consider that developments in information technology are creating a paradigm shift and that only organizations that understand this change and respond to it will survive. They point to two eras in the development of information technology.

The first era was that of stand-alone computing, using at first the cumbersome mainframes and mini-computers, later the inexpensive and increasingly versatile personal computers. The emphasis was on the automation of clerical tasks. Though this enabled many people to work more productively, the individual or the information technology department of a business tended to work in isolation – the computer users did not exchange information.

The transition to the second era came with network computing, which first opened up the possibility of reengineering business processes and creating new high performance work groups linked by local area networks. Organizations are moving towards a model with fewer management layers, based on empowered business teams, yet at the same time integrated, with an overall strategy and architecture.

Schein (1994: 139-146) in the article already quoted, goes on to consider how such an IT system can enhance the chances for organizational innovation. Total networking capacity aids the development and implementation of new ideas by making it possible to connect everyone in the organization with everyone else, especially to connect subcultures with one another and with the parent culture. Equally important are the information channels between the organization and its environment. Moreover, the capacity of the organization to innovate increases to the extent that it can recognize and implement innovations in IT as these apply to its own work processes.

It is, however, worldwide telecommunications that have made business global (Keen and Cummins, 1995; Cronin, 1995). With modern telecommunications, the network itself has become global. A company has an immediate means of access to information on suppliers, customers, market trends, and changes in the financial, social and political environment relevant to its business. Information technology is making it possible for any company to be competitive in the global business arena. Size is no longer an advantage: Small companies, more flexible and equipped to be innovative in the sense described by Schein, have the same access to information as large companies encumbered with a massive infrastructure that is difficult to change. It is significant that large companies are increasingly resorting to divestiture and outsourcing of production and services to their smaller counterparts.

Henderson and Venkatraman (1994) studied organizational transformation under the impact of IT. As IT becomes an integral part of an organization's strategy, deployed to gain competitive advantage, its mere superimposition on existing structure and functions will not yield superior performance. Successful organizations use their IT capabilities to transform their businesses.

Crowston and Malone (1994) reviewed empirical studies of the effects of IT on organizations. The effects found were diverse: IT may reduce the number of routine employees, yet at the same time create new kinds of jobs; reduce or enhance the number of levels of management; lead to increased centralization or decentralization; deskill or upgrade jobs. The results of introducing IT are not predetermined: They depend on the nature of the organization and the objectives of management. The designer of the IT system is an organizational change agent, who must be explicit about the results to be achieved.

5. THE ORGANIZATIONAL PLANNING PROCESS IN THE THAI COMPUTERIZED BUSINESS ORGANIZATION

5.1 The Organizational Mission

The first step in the process is to formulate or to review the organizational mission, the basic purpose and motivating force for the organization's existence. The mission must incorporate the vision of top management: a vivid picture of where and what the organization should be in the future, and whom it will serve - its long term future state - inspiring employees' enthusiastic support towards fulfilling the aspirations of the organization. The mission is generally describable in terms of the organization's philosophy, self-concepts, public image, location, technology, concern for survival, customer targets and products (Drucker, 1974: 77-90; Belasco, 1990: 3-4; Stoner-Zemel, 1990: 16-17; Morrissey, 1988: 50-52; Nash, 1988: 155-156; Want, 1986: 46-50; Crum, 1990: 5-6; David, 1989: 90-97).

Once top management - with the Board of Directors, if there is one - have established, or in the case of an existing organization, reformulated the mission, it must be communicated to the rest of the organization. Sharing the mission with employees creates a sense of common understanding that helps unify the goals, decisions and actions of everyone in the organization. Managers set goals, make decisions and specify courses of action, referring back to the mission to determine whether these are consistent with the organization's purposes. The mission likewise

reveals the organization's direction, purpose and vision to shareholders outside the organization itself.

The managers of the world's largest bank, Dai-Ichi Kangyo Bank (DKB) are concerned about their role in society. Their vision is of addressing customer needs, meeting international obligations and providing for employees. Their mission is to help raise the standard of living by providing the best possible service to the public, to support the development of a wide range of businesses by providing funding, and to contribute to the development of domestic and overseas economies; and to create a workplace where employees can find fulfilling work and develop their individuality and ingenuity (Inoue, 1990: 32-33).

Swierczek, (1989: 3-10) studied Thai organizational missions and culture and argued that their importance will increase as the trend to globalization continues and Southeast Asia becomes a major focal area for investment and technology transfer for export-oriented growth. He develops a perspective on mission, culture and organizational implications for management of technology and presents a case study on the training and development of Thai youths to become the kind of executives the organizations of the 21'st century will require. At the start, this requires an appropriate organizational culture. It must be recognized that the right kind of corporate culture supports every stage of organizational planning and management.

While at the Graduate School of Business, Thammasart University and the National Institute of Development Administration in Bangkok, Swierczek (1989: 3-10) surveyed opinions on organizational culture and technology. Participants were managers who were enrolled in MBA programmes, or who were attending specialized management development workshops under the auspices of organizations such as ILO, UNESCO, ESCAP or ASEAN. Ages ranged from 22 to 45. Approximately 45% had backgrounds in engineering. Of the 165 participants, 35 were from the ASEAN region or the Indian subcontinent.

Participants were asked to write two or three paragraphs describing their own conceptions of the ideal type of organization. They shared their ideas with other participants in group discussions. When the descriptions were analysed for

content, 631 specific items or issues were identified. These items are listed in order of decreasing frequency in Table 2.

Table 2. Overall Organizational Themes and Issues

Themes (Issues)	Responses	% of Total
1. 1. Human resource management and development focus	260	40.0
(a) Work conditions (salary, benefits, promotion, rewards)	(176)	(27.0)
(b) Motivation	(36)	(5.5)
(c) Training and development	(34)	(5.2)
(d) Overall concern	(14)	(2.2)
2. Teamwork and communication	90	14.0
3. Job characteristics	67	10.3
4. Management and leadership	60	9.2
5. Performance	52	8.0
6. Organizational structure	33	5.0
7. Decision making	23	3.5
8. Environment	20	3.0
9. Satisfaction	18	2.8
10. Policy	16	2.5
11. Technology	12	1.8

It is evident from the responses that this group of managers showed very great concern for issues related to *Human Resource Management and Development*, in particular those aspects centering round work conditions. These accounted for 27% of responses - the largest of all categories. A typical statement was: "An ideal organization should offer high security, reasonable compensation, and provide benefits to the employees such as health care and funds for education so that the organization will receive complete dedication from its employees."

Motivation, and Training and Development, were categories specifically related to human resource development. According to one manager: "My ideal organization would consider the individual and their work group's problems, their needs, their satisfaction and their hopes to find ways to motivate them and develop them in all their aspects. Employees should have the opportunity to show their creativeness and capabilities." A large proportion of the respondents considered that training, education, seminars and overseas experience were important.

These managers were less concerned for HRD overall as for such specific issues as salaries and promotion. Though next to last among the responses in this category, overall concern for HRD was still important. As one wrote: "The organization should recognize that the most important assets of the company is the people who work there and not the fixed assets."

Second in the frequency of citation overall was *Teamwork and Communication*, which includes such items as working well together, team approach, QCs, better communication, reduced conflict and greater understanding. As one respondent expressed it: "My ideal organization would develop a working atmosphere in which everyone joins together to improve productivity." Communication is an important part of the organizational climate: "Employers should explain to employees about organizational goals and listen to employees." This is a much more group-oriented feature of organizations, concerned with social relationships rather than individuals as such.

Job Characteristics included, as well as standard job descriptions, such job-related issues as responsibility, challenge, interesting work, recognition, variety, achievement and problem solving. Job issues accounted for over 10% of issues. An ideal organization: "Must give me some authority to do the work I am responsible for and some degree of decision making" - it "Would give me an interesting job which can make my work meaningful."

Fourthly came *Management and Leadership*. This category included, for instance, a strong, kind boss with a good personality and good relationships with the boss, fair and just decisions and good leadership. Two dominant trends were evident. On the one hand was paternal management: "My boss should be kind,

encourage good performance and should not be strict on things that are not necessary." On the other was professional management. This issue of paternal and professional style is relevant to the consideration of organizational structure.

Performance was the first of the outcome-related categories. This includes such factors as profit, productivity, growth and quality, of which profit was the most often cited and quality the least: "The ideal company is the one that can give a maximum profit." Young managers hope to work for growing companies. They favour sharing of profits in the form of incentives and competitive salaries – relating back to the human resource management theme. It is interesting that, with this group of managers, profits and performance are not high priorities.

Aspects of *Organizational Structure* that were emphasized included coordination, good organization, flexibility, rationalization of the system and size. Respondents were divided between favouring a "family" type of organization, or a "rational" type. A manager favouring the family organization would say: "My ideal organization is the company where all employees work in coordination as a family," or "Make an ideal company a family where every member works together for a common objective." As against this, according to advocates of the rational approach, "My ideal company has a good organization and structure. It isn't a family business but a rational organization," and "My ideal company should have a complete system organization. Every system in my ideal company will have their own responsibility," or again "I prefer to think of the organization as a living thing which is action oriented." The family organization creates an atmosphere of good social relationships and harmony, while the rational organization is more interested in performance and efficiency. Some participants admired large, well-known companies, others were more interested in smaller firms. In the family organization management would be paternal; the rational organization requires professional management.

Decision making involves issues of participation, of MBO approach versus the authoritarian, top-down style. Most managers favoured greater participation: "Employees should have freedom and authority for making decisions by themselves" – though decision making, as a whole, was cited in only 3.5% of responses.

How the organization relates to its *Environment*, or how it is perceived by outsiders, forms one category : “The final important aspect of my ideal company is that it should be accepted by the society and its action must not be illegal,” or “My ideal company would be a firm which is well known by the public.” Some of these young managers are clearly concerned about the social impact of their business, while others are attracted by the prestige of association with a famous company.

The remaining outcome-related category, *Job Satisfaction*, comprised a not very highly rated set of factors, including happy employees, enjoyment of work, a feeling of pride and a sense of belonging. According to one manager: “An ideal organization should make people feel good at working. To accomplish this, a company should have a human-oriented approach mainly through psychology.” Many managers in the group did not share this focus.

Only 16 respondents cited *Policy*, a category that included business policy and strategic management. Some who did were customer-oriented, but most goal- and objective-oriented: “An ideal organization should have a clear set of short- and long-term objectives and goals.”

It is surprising that *Technology* was the least-mentioned aspect of organization, being cited by only 12 respondents. In so far as it was discussed, the focus was on modern techniques and office automation. “According to my view, an ideal organization would be a company with all the best technology available but not one which would completely forget the human factor.” One respondent considered that, not technology, but training and human resource development, was the key to growth, It seems clear that managers still require a good deal of education in the impact of technology.

Taken as a whole, this unobtrusive investigation, in which participants were able to express their conceptions of an ideal organization without prompting, gives an interesting view of the relationship between culture and management.

5.2 Organizational Goals

Once the top managers have developed the basic purpose of the organization, the next step in the planning process is to establish goals which will direct organizational resources and efforts towards fulfilling the mission. Goals

specify exactly where the organization wants to go and what must be achieved, thus allowing managers to develop the plans that will translate the mission into reality (Drucker, 1974: 99-102; Richards, 1986: 2-3). Although top managers and the Board of Directors are responsible for establishing the mission as the topmost goal, goals are also set and followed by lower-level managers to guide the planning process throughout the organization.

Goals are required at three specific levels in the organization: strategic, tactical and operational - at each of which they focus attention on responsibilities and activities that direct the organization towards the objectives specified by the mission statement.

1) Strategic goals are set by top management. They are broadly defined overall targets for the organization. Also known as official or corporate-level goals, they are formal statements of the organization's major intended achievements. Drucker suggests eight key areas, involved in performance and survival, within which businesses, to be effective, should develop strategic goals: marketing, innovation, human resources, financial resources, physical resources, productivity, social responsibility and profitability (Table 3).

Table 3. Strategic Goal Areas for Business

Key Area	Sub-key Areas
1. Marketing	(1) Market share (2) Customer service (3) Product and market development
2. Innovation	(1) In goods and services (2) In organizational skills and activities
3. Human resources	(1) Management development and performance (2) Employee skills and attitudes
4. Financial resources	(1) Development of funding sources (2) Efficient use of financial resources
5. Physical resources	(1) Development of sources of supply (2) Efficient use of physical resources

Key Area	Sub-key Areas
6. Productivity	(1) Efficient application of resources to results
7. Social responsibility	(1) Responsibility for impact on community and society
8. Profit requirement	(1) Profitability in support of all goals
	(2) Profitability in support of organizational survival and growth

For example, the government-owned, Montreal-based rail freight company, Canadian National, has a clear mission and multiple strategic goals - that is, to be the first to meet customers' transport and distribution needs, to move goods on time, safely and without damage. Its strategic goals then must be to understand these needs, to give top quality, environmentally responsible and cost competitive service, to remain financially sound and to create a challenging and fulfilling work place (Drucker, 1974: 100-101).

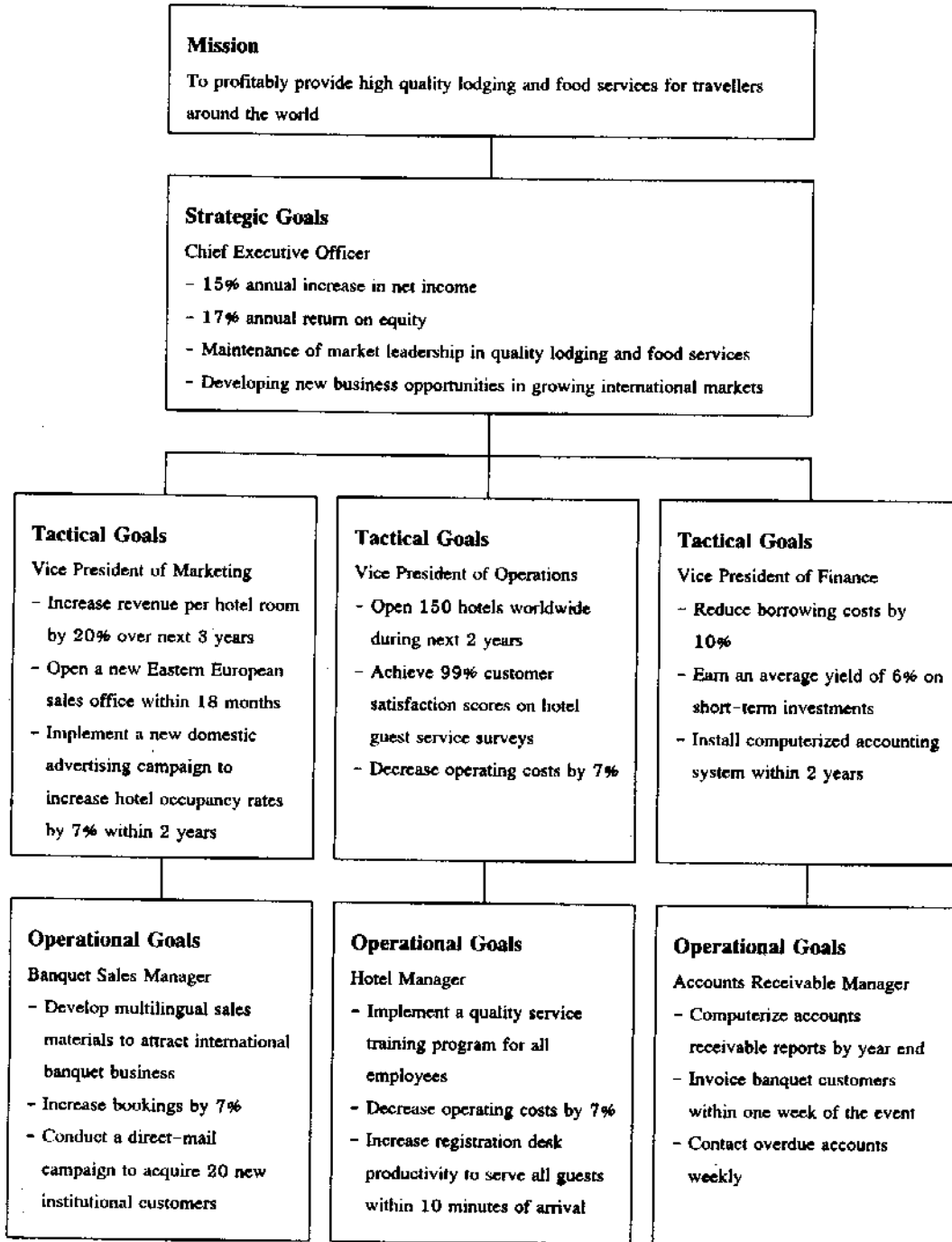
2) Tactical Goals - or business-level goals - are set by top and middle management. They are targets for specific business divisions or functional units within the organization. They represent what must be accomplished in order to achieve the strategic goals of the organization. Thus, for Canadian National, the railway business division has two tactical goals: to achieve productivity gains through cost controls and technological advance, and to increase revenue and profitability by aggressive marketing efforts towards product differentiation and increased market share. The non-transport division handles energy exploration, construction and contracting and services, its tactical goal being to contribute to the organization's financial performance by maximizing the value and earning potential of its assets (Richards, 1986: 34-35).

3) Operational Goals - or functional level goals - are set by middle and first-line management. They are targets for departments and individual members of functional or business units and are generally short-term objectives in support of tactical and strategic goals. Operational goals of Canadian National have included: (1) purchasing 30 new fuel-efficient locomotives to increase equipment productivity and raise transport service quality, (2) developing and testing more

sophisticated railway-control equipment to enhance safety and service quality, and (3) selling off redundant track systems (Richards, 1986: 39-40).

In any organization, goals form a wide ranging hierarchy, in which those at each level form the basis for those at the next lower level (Chart 1).

Chart 1. Hierarchy of Goals for a Hotel Chain



Thus the goals at one level become the means by which the goals at the next higher level are achieved. The tactical goals are the means to the strategic goals, which cannot be achieved unless the tactical goals are achieved. In Chart 1, to meet the strategic goal of increasing net income by 18% requires that three tactical goals must be accomplished: 150 new hotels must be opened over the next 2 years, revenue must increase by 20% over 3 years, and investments must earn 6% interest. This cascading relationship between successive levels, the "means-ends chain," must be carefully coordinated (Richards, 1986: 24-43; Raia, 1974: 29).

To be an effective guide to decision making and action by organizational members, goals must not merely be hypothetical statements about future results. Managers must be sure to set goals that are challenging, attainable, specific, measurable, time limited and relevant.

Goals to which work groups, managers and employees throughout the organization can be committed must be decided, coordinated and prioritized. Top managers establish the mission and strategic goals. On the other hand, lower level goals are assigned or, more often, developed jointly between those managers responsible for achieving them and the level of management immediately above. Top and middle managers together would set tactical goals; middle and first-line managers would set operational goals. In this way, lower-level managers can propose goals that are realistic and consistent with their work units' capabilities and with their own skills and abilities. These goals will be reviewed and approved by the upper level management, to ensure that they directly support higher-level organizational goals (Mendleson, 1980: 56-61; Pritchard et al., 1988: 69-78).

This process of goal setting and approval enables managers to maintain consistency and coordination among goals throughout the organization, so that conflicts between goals do not occur. Managers must balance multiple goals, all important to the long-term performance of the organization. They cannot focus on one, to the exclusion of others. They must consider the short- and long-term consequences of each and balance them accordingly (Ewing, 1968: 26-29; Drucker, 1986: 117-119).

For goals to be optimally effective, managers must gain the commitment of the people who will work to achieve them. This may often be a matter of using managerial authority and assigning employees to the task of achieving particular goals. It is observed that when there is mutual support and trust between managers and employees, the members of a work group are more likely to be committed to achieving the assigned goals. Peer and group pressure can promote commitment, especially when group members set an example in making a commitment to goals. Also, individuals are likely to show more commitment when they are offered incentives and rewards for performance (Locke et al., 1988: 23-29; Prichard et al., 1988: 69-78; Locke, 1978: 594-601).

Individuals will experience a stronger commitment to goals that they believe can be successfully achieved than to goals that they feel are unattainable. In addition, they will be more strongly motivated to achieve a goal when they clearly understand the goal and how to perform the tasks required to achieve it. Finally, commitment is likely to be greater among employees who have participated at each level in the process of setting the goals (Locke, 1988: 23-29; Latham et al., 1988: 753-772; Richards, 1986:21).

5.3 Organizational Planning

With the mission and goals decided, the next step in planning is how to achieve the desired results. There may be many paths to any one goal. Planning concentrates organizational decision making and action on that path that management regards as the most effective and efficient in achieving the desired end. Whatever the number and nature of goals, managerial planning is involved throughout the entire organization.

As with goals, plans are developed at three levels: strategic, tactical and operational, allowing managers at each level to decide the actions necessary in order that the goals and hence the mission, can be achieved.

1) **Strategic Plans** aim to achieve strategic goals. They are developed by top management, generally cover resource allocation and specify a broad range of longer term organizational activities. Their wide scope is evident in its impact on

the organization. Thus, the top management of a firm manufacturing mechanics' and technicians' tools, wishing to grow globally, devised a plan to expand sales, formerly restricted to the automotive market, to encompass a broader market of industrial users. The plan would include long term investment in new manufacturing and warehouse facilities to serve these new markets (Ackoff, 1981: 4-5; Anderson, 1972: 274-275).

2) Tactical plans embody the means for achieving tactical goals. Typically, they are created jointly by top and middle management and cover a shorter time period than strategic plans and are narrower in scope, being designed to be implemented by business divisions or individual groups. Thus the company of the preceding example, Snap-on Tools, in order to be the most reliable supplier for its new customers, installed a computer system in its sales department, enabling representatives to locate any product in the inventory in any U.S. location and ship it direct to the customer (Ackoff, 1981: 4-5).

3) Operational Plans provide the means for achieving operational goals, which in turn support the implementation of tactical plans. They will specify decisions and actions that must be taken by divisions and functional departments, and cover briefer periods than tactical plans, including day-to-day activities of the organization. Snap-on Tools must plan to create specialized tools required by its new industrial customers, for example a unique 5 foot stainless steel wrench required by an aluminium smelter (Kast and Rosenzweig, 1974: 490-493).

Organizational planning covers a variety of time frames. Long range planning for strategic goals may extend to more than 5 years into the future, depending on the organization. Elizabeth Dole and the Department of Labor, endeavouring to identify future workforce skills, had to look many years into the future to ascertain skills that graduates would then need. In dynamic, complex environments, strategic plans are likely to cover shorter periods. In simple, unchanging environments they might extend over 10 or even 20 years. Xerox, aiming to create an entirely new product line in support of this company's strategic goal of becoming the world's top document-processing firm, spent 10 years over developing and marketing DocuTech, a digital imaging machine that allows

computer creation of documents for fast, high quality copying (Fallen, 1983: 1-56; McConkey, 1983: 38; Bourgeois and Eisenhardt, 1988: 816-835; Veresper, 1991: 23-34; Norman, 1991: 70-71).

Tactical planning generally covers an intermediate range, of 1 to 5 years, again depending on the exact circumstances of the organization. Operational, short-range planning spans periods of 1 year or less. For British Petroleum both intermediate and short-range planning are vital to meeting profitability goals. Intermediate-range planning guides exploration and development efforts, for instance in Papua New Guinea and the North Sea - planning from drilling to full production may range up to 4 years. Short range planning covers the management of BP's global network of gas stations (McConkey, 1983: 38).

Managers today face a major challenge to produce immediate results while ensuring long term viability of the organization. At the same time, they must be concerned with quarterly earnings and stock price expectations of shareholders while developing plans for a future that may be 5 to 20 years ahead. Non-profit making and governmental managers have similar problems, especially where funds to meet clients' needs are limited. In the face of demands for immediate results, managers must allot their time so as not to neglect activities that support the long term viability and growth of the organization (Curran, 1988: 84-89; Harper, 1990: 1-14,32; Hector, 1988: 64-76).

Managers match the plan to the situation. Generally, they need to handle three types of situation: one-time events not likely to recur, situations that recur regularly and those that recur more rarely. Correspondingly, there are single use, standing and contingency plans.

6. CONCLUSION AND RECOMMENDATIONS

Planning for optimal effectiveness in the Thai computerized business organization will require an awareness of organizational change and transition. Such knowledge is very relevant to the current problem of lack of effective organizational planning for the approaching 21'st century. At the same time, in order to develop strong and effective organizations for the coming century, one should try to

understand how planning at the individual behavioral level can be related to wider corporate planning.

For effective organizational planning, one should keep clearly in mind the characteristic structure and objectives of organizational planning: (1) the organization's mission, (2) strategic goals, (3) tactical goals, and (4) operational goals. To accomplish the mission, one must attain the strategic goals, hence the tactical, and at base the operational goals.

Every person involved in any plan should be trained to clearly understand how to plan. And one must keep in mind that an effective plan will be the product of a group and not of one individual alone. One should not forget the concept of synergy - that any plan created by a group will be more effective than any of the group members working alone could have achieved.

It is regrettable that, in developing countries such as Thailand, such an approach to planning seems far from reality. Most Thai organizations, especially medium size and small companies, have nothing we could call a corporate or organization plan. Though some, mainly large, companies do have such a plan it is usually far from the theoretically ideal.

In practice, most local companies have what they would call a strategic plan, but for only a few is it really the best. Moreover, Thai organizations having no experience in corporate or organizational planning can find no examples to follow among those in the same business as themselves.

However, the public sector in Thailand does present the example of its 5-year National Economic and Social Development Plans, dating from 1961; while state enterprises have employed corporate plans since 1984. These provide some examples for Thai private sector companies to study and apply.

Thai/foreign joint venture corporations have more opportunities than do purely local ones to learn effective planning, as the overseas parent company can transfer its planning technology to its daughter company in Thailand.

The more globalized a business organization becomes the more effective must its corporate planning become. The mission may well be directed in part

towards taking advantage of advanced information technology breakthroughs of the future. Otherwise the organization will not compete with its rivals on the global stage.

As the world progresses, more and more do organizations find themselves having to adopt computerized technology and to adapt themselves to it. The question of how to achieve an optimum performance in such a computerized environment faces the organization at every level of management and personnel. As we approach the turn of the century, competition among business organizations is taking place on an ever wider front. Most national level business organizations of the present could well be international in the near future. Competition will demand a faster and finer performance than it did in the past. Organizational objectives will demand optimum performance - and this means in practice computerized technology.

To use this technology will require a full appreciation and understanding of its three major variables - hardware, software and humanware. Many countries in the ESCAP region still do not know how to take on and apply computerized technology. They can buy the hardware and the software, but not the humanware able to take advantage of it - here "technology transfer" fails.

It is especially the computerization of information technology, its concepts, structure and elements, that an organization must understand, in order to effectively apply information technology to business at the worldwide level. But many business organizations in developing countries still have no idea of what is meant by a database, a management information system, decision support system or executive support system - let alone the efficient use of these systems in organizational planning. It is not surprising that in the modern business world they are weak.

It is true however that many other organizations have begun to make use of these aspects of information technology in support of their business. However they are often still far from the optimum performance they need. The challenge that faces all these organizations is, not only to learn to understand the hardware and the software, to be able to adopt and adapt it to their own business purposes, but to

train the humanware for computerized technology, to equip themselves for the future.

7. BIBLIOGRAPHY

- Ackoff, R. 1981. *Creating the Corporate Future*. New York: John Wiley.
- Anderson, Theodore A. 1972. "Coordinating Strategic and Operational Planning," in *Concepts for Corporate Strategy*, edited by John W. Bonge and Bruce P. Coleman, pp. 274-275. New York: Macmillan.
- Barker, J.A. 1989. *Discovering the Future: The Business of Paradigms*. 2nd ed. (video-cassette). Burnside, MN: Charthouse Learning Corporation.
- Bartol, Kathryn M. and Martin, David C. 1994. *Management*. New York: McGraw-Hill, Inc.
- Belasco, James A. 1990. "This Vision Thing," *Executive Excellence*, January, pp. 3-4.
- Bourgeois III, L.J. and Eisenhardt, Kathleen M. 1988. "Strategic Decision Processes in High Velocity Environments: Four Cases in the Microcomputer Industry," *Management Science*. 34, No. 7, July, pp. 816-835.
- Boulding, K.E. 1988. *The Organizational Revolution: A Study in the Ethics of Economic Organization*. Chicago: Quadrangle Books.
- Cronin, M. 1995. "Internet: A New Business Building Block," in *Productivity in the Office and the Factory*, ed. P. Gray and J. Jurison, pp. 98-104. Danvers, MA: Boyd and Fraser.
- Crowston, K. and Malone, T.S. 1994. "Information Technology and Work Organization," in *Information Technology and the Corporation of the 1990s*, ed. T.J. Allen and M.S. Scott Morton, pp. 249-275. New York: Oxford University Press.
- Crum, Thomas F. 1990. "Clarity of Vision," *Executive Excellence*, January, pp. 5-6.
- Curran, John J. 1988. "Companies That Rob the Future," *Forbes*, 4 July, pp. 84-89.
- David, Fred R. 1989. "How Companies Define Their Mission," *Long Range Planning*, 22, No. 1, pp. 90-97.
- Drucker, Peter F. 1974. *Management Tasks, Responsibilities, Practices*. New York: Harper and Row.
- Dreyfuss, Joel. 1988. "Catching the Computer Wave," *Fortune*, Sept. 26.
- Dunham, R.B. 1983. *The Design of Jobs, Organization Development: Theory, Practice, Research*. Plano, TX: Business Publications.
- EconNews staff. 1995. "Interview with Dr. Sumet Tantivejakul, General Secretary of the Office of National Economic and Social Development Board, on Concepts of the 8th Plan: Human is the Most Important Thing," *EconNews: The Weekly Economic Newspaper*, pp. 15-19.

- Embree, John F. 1950. "Thailand - a Loosely Structured Social System," *American Anthropologist*, 52, pp. 181-193.
- Ewing, David W. 1968. *The Practice of Planning*. New York: Harper and Row.
- Fallen, William K. ed. 1983. *AMA Management Handbook*. 2nd ed. New York: Amacom.
- Finn, Nancy B. 1983. *The Electronic Office*. Englewood Cliffs, N.J.: Prentice-Hall.
- Goodstein, Leonard D., Nolan, Timothy M. and Pfeiffer, J. William. 1993. *Applied Strategic Planning: A Comprehensive Guide*. New York: McGraw-Hill.
- Gordon B. Davis and Olson, Margrethe H. 1985. *Management Information Systems: Conceptual Foundations, Structure, and Development*. 2nd ed. New York: McGraw-Hill.
- Hackman, R. and G. Oldham. 1980. *Work Redesign*. Reading, MA: Addison-Wesley.
- Hamel, G. and Prahalad, C. K. 1989. "Strategic Intent," *Harvard Business Review*, May-June, pp. 63-76. Reprinted in J.W. Pfeiffer (Ed). 1991. *Strategic Planning. Selected Readings*. Rev. ed. San Diego, CA: Pfeiffer and Company.
- Harper, Stephen C. 1990. "How to Prevent the Rude Awakening of Management Shock," *Industrial Management*, July-August, pp. 1-14, 32.
- Hector, Gary. 1988. "Yes, You Can Manage Long Term," *Forbes*, 21 November, pp. 64-76.
- Henderson, J.C. and Venkatraman, N. (1994). "Strategic Alignment: A Model for Organization Transformation via Information Technology," in *Information Technology and the Corporation of the 1990s*. Ed. T.J. Allen and M.S. Scott Morton, pp. 202-220. New York: Oxford University Press.
- Inoue, Yasue. 1990. "Management Challenge for the Dai-Ichi Kangyo Bank Ltd," *Business Japan*, October, pp. 32-33.
- Kast, Fremont E. and Rosenzweig, James E. 1974. *Organization and Management: A Systems Approach*. New York: McGraw-Hill.
- Keen, P.G.W. and Cummins, J.H. 1995. "Telecommunications: The Opportunity and the Challenge," in *Productivity in the Office and the Factory*, edited by P. Gray and J. Jurison, pp. 60-73. Danvers, MA: Boyd and Fraser.
- Latham, Gary P., Erez, Miriam and Locke, Edwin A. 1988. "Resolving Scientific Disputes by the Joint Design of Crucial Experiments by the Antagonists: Application to the Erez-Latham Dispute Regarding Participation in Goal Setting," *Journal of Applied Psychology*, 73, No. 4, pp. 753-772.
- Laudon, Kenneth C. and Laudon, Jane Price. 1991. *Management Information Systems*. 2nd ed. New York: Macmillan.

- Locke, Edwin A. 1978. "The Ubiquity of the Technique of Goal Setting in Theories of and Approaches to Employee Motivation," *Academy of Management Review*, July, pp. 594-601.
- Locke, Edwin A., Latham, Gary P. and Erez, Miriam. 1988. "The Determinants of Goal Commitment," *Academy of Management Review*, 13, No. 1, pp. 28-29.
- McConkey, Dale D. 1983. *How to Manage by Results*. New York: Amacom.
- McGregor, Douglas. 1960. *The Human Side of Enterprise*. New York: McGraw-Hill.
- McLeod, Jr., Raymond 1986. *Management Information Systems*., Chicago: Science Research Associates.
- Mendleson, Jack L. 1980. "Goals Setting: An Important Management Tool," in *Executive Skills: A Management by Objectives Approach*, edited by George Odiorne, Heinz Wehrich and Jack Mendleson. Dubuque, Iowa: Brown.
- Miles, R. E. 1975. *Theories of Management: Implications for Organizational Behavior and Development*. New York: McGraw-Hill.
- Morrissey, George L. 1988. "Who Needs a Mission Statement? You Do," *Training and Development Journal*, March, pp. 50-52.
- Nash, Laura. 1988. "Mission Statement - Mirrors and Windows," *Harvard Business Review*, March-April, pp. 155-156.
- Norman, James R. 1991. "Xerox on The Move," *Forbes*, 10, June pp. 70-71.
- Pritchard, Reber D., Reth, Phillip L., Jones, Steven D., Galgoory, Patricia J. and Watson, Margaret D. 1988. "Designing a Goal-Setting System to Enhance Performance: A Practical Guide," *Organizational Dynamics*, Summer, pp. 69-78.
- Richards, Max D. 1986. *Setting Strategic Goals and Objectives*. St. Paul, Minn.: West Publishing.
- Raia, Anthony P. 1974. *Managing by Objectives*. Glenview, IL.: Scott, Moresman.
- Schein, B.M. 1994. "Innovative cultures and organizations," in *Information Technology and the Corporation of the 1990s*, ed. T.J. Allen and M.S. Scott Morton pp. 125-139. New York: Oxford University Press.
- Scully, J. and Byrne, J.A. 1987. *Odyssey: Pepsi to Apple*. New York: Harper and Row.
- Stoner-Zemel, Jesse. 1990. "Realizing Your Vision," *Executive Excellence*, July, pp. 16-17.
- Suwannabol, Issara. 1984. *Handbook for Corporate Planning*. Bangkok: National Budget Office (Stencil).
- Swierczek, Fredric William. 1989. "Images of Organization: Culture and the Management of Technology," *Journal of Managerial Psychology*, Vol. 4, No. 3, pp. 3-10.

Tapscott, D. and Caston, A. 1993. *Paradigm Shift: The New Promise of Information Technology*. New York: McGraw-Hill, Inc.

Veresper, Michael A. 1991. "Gutsy Decisions of 1990," *Industry Week*, 18 February, pp. 23-34.

Want, Jerome H. 1986. "Corporate Mission," *Management Review*, August, pp. 46-50.