A CROSS CULTURAL ANALYSIS OF FACTORS IMPACTING STRATEGY IMPLEMENTATION: THE U.S. vs. JAPAN

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Taylor Cox, Jr.
University of Michigan

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ABSTRACT

There is increasing concern about the ability of U.S. corporations in many industries to successfully compete on quality and cost in world markets. A lack of competitiveness with Japanese firms is especially well documented. It is the thesis of this article that an important, but frequently overlooked, piece of the competitiveness puzzle is that the better Japanese firms are very proficient at implementing strategies and ideas for management improvement, while U.S. firms are comparatively inept when it comes to putting ideas into practice on a broad scale. Six aspects of management practice which are thought responsible for this competitive disadvantage are cited and discussed: firm size, the decentralization of decision making, communications/integration mechanisms, employee turnover, time horizons for decisions and intra-organizational diversity. Suggestions or change along these dimensions are offered toward improving international competitiveness of U.S. firms.
U.S. firms in an increasing number of industries are experiencing difficulty in successfully competing in world markets. The most formidable foe continues to be Japan which has been so impressive as to prompt a leading writer on U.S. manufacturing to remark that "Japan is now expected to dominate in quality and cost in any industry in which they choose to compete". Among the reasons cited for Japan's superior performance are cultural differences, the impact of exchange rates, differences in worker motivation levels, more protective tariffs, better government/industry relations, and better management, especially of manufacturing. No doubt all of these have some relevance and they are beginning to receive attention by academics and practitioners in America. While attention to these issues is well deserved, this writer contends that much of the difficulty in meeting international competition is due to "implementation paralysis". The term refers to our comparative inability to put ideas, policies and strategies into practice.

THE ABIC SYNDROME

The history of U.S. business is replete with examples of what might be termed the "ABIC" syndrome (i.e., abandoned before it's completed) in which ideas for improving management practice experience the following sequence of events: (1) advocation by academics, consultants and pioneering practitioners (2) adoption by a handful of industry-leader firms often on a pilot or limited-scope basis (3) failure to "ever" extend the technique to widespread adoption throughout U.S. industry or even to achieve pervasive use within some of the pioneer firms, often in spite of good results from the initial applications (4) eventual abandonment of the idea or a watering down of support often in preference to another "new" idea but sometimes as simply a return to business as usual. A case in point is the idea, originating from the British coal mine experiments of the 1940s, of organizing production workers into
semi-autonomous teams each producing a complete product. Although Proctor and Gamble has reported productivity improvements of 30-40% using the technique, a recent U.S. industry analysis concludes that plants that use teamwork constitute only a small minority of U.S. workplaces.2

The ABIC syndrome is both a result of ineffective implementation and a cause of future implementation difficulties in that early abandonment of past strategies makes it harder to obtain employee commitment to new ones. This effect is well illustrated by the Black and Decker effort to implement MBO as explained in the following quotation:

"Many managers at Black & Decker did not initially have a positive reaction to the new MBO program and felt it was simply another fad that would be soon forgotten, because they had experienced new programs in the past that were later abandoned. Our interview results suggested that this negative reaction based on past experience may have significantly influenced the manner in which certain managers carried out the goal-setting and performance review process [of MBO]."3

Other notable examples of the syndrome are the U.S. experience with benefit-sharing compensation systems, organizational behavior modification, job enrichment and participative management. There are now appearances that a similar fate awaits quality circles.

IMPLEMENTATION PARALYSIS: A U.S. COMPETITIVE MILLSTONE

The upshot of the ABIC syndrome is that rarely are the ideas truly implemented on a sufficiently broad scale to have a real impact on U.S. competitiveness or even individual firm competitiveness since implementation within firms is often restricted to one or two units where the total might be dozens.
If strategic initiatives are implemented at all, it occurs slowly. Meanwhile the competitive advantage that might have been gained from a faster decision implementation process is lost. By contrast, the Japanese are very effective implementers. Their thoroughness, tenacity and speed in the implementation of management decisions and approaches yields an important, and frequently overlooked, competitive advantage.

Although empirical data relevant to the contention that Japanese firms are better implementers than U.S. firms is hard to come by, there is at least one large-sample study which has addressed implementation effectiveness directly. In a study of 261 respondents (of various organizational levels) from 27 U.S. and 16 Japanese operating units, Pascale compared American and Japanese firms on a number of management and structure dimensions. Among his measures were items on the perceived quality of decisions and the perceived quality of "implementation" of key decisions. Respondents rated their firms on overall impressions of these items using a 1-10 scale for decision quality and a 1-5 scale for implementation quality. Interestingly, the Japanese respondents gave significantly higher ratings to their firms on implementation quality than did the U.S. respondents (4.9 versus 3.5) even though there were no significant differences in the ratings of the quality of the decisions themselves. This research is strongly supportive of the central theme that it is not a lack of good ideas/strategies that hampers U.S. competitive productivity and quality but rather the failure to implement them.

The balance of this paper compares U.S. and Japanese corporations on several structural and policy dimensions thought to be major contributors to this difference in implementation effectiveness.
FACTORs IMPACTING IMPLEMENTATION

In thinking about why U.S. firms seem be at a disadvantage in implementation effectiveness (i.e., the speed and thoroughness of strategy implementation) the initial temptation is to point to cultural factors. This approach is especially popular in explaining competitive failures against the Japanese. For example, it has been noted that the Japanese society is far more homogeneous than that of the U.S. where the great diversity of cultural heritage virtually "defines" the country. In the context of understanding decision implementation, this fact is important because it is clearly easier to get consensus and commitment to a decision when participants share values and where perceptual and cognition systems are more uniform. While the cultural argument undoubtedly has some applicability here, it is important not to lose sight of other, perhaps equally potent, forces. There are at least two reasons for this. First, as several experts have recently pointed out, cultural differences account for only a segment, some say a relatively minor one, of the total competitive advantage that the Japanese enjoy in several industries. Second, it will be more productive to identify areas over which U.S. managers can exercise more control in effecting change.

I believe that there are a number of factors under the decision authority of U.S. top management which account for a large percentage of the difference in implementation effectiveness. Six such factors will be discussed here. They are organizational size, the decentralization of decision making, integration mechanisms, employee turnover, time frames for decision making and the degree of intra-firm diversity. The link between each of these and comparative implementation effectiveness is discussed in the following paragraphs.
SIZE

In the first place, the sheer size of many U.S. firms makes widespread implementation of new ideas a difficult task. The recent trend toward merger of large and often unrelated businesses has only exacerbated this problem. The difference between the U.S. and Japan on this score is easily demonstrated as illustrated by the following examples:

1. As of 1986 Toyota had roughly 80,000 employees and Nissan 109,000 compared to 369,000 at Ford; Fujitsu employed 34,000 and Toshiba 114,000 while IBM employed 405,000; Nec employed 33,000 people versus nearly 90,000 at Texas Instruments.

2. In a study of 55 American and 51 Japanese manufacturing plants, in which an effort to match on size was made, the U.S. plants had an average of 110 more employees than the Japanese plants.

3. In a study of 227 U.S. and 291 Japanese firms chosen from among the largest in both countries, 18 percent of the Japanese firms had sales of $110 million or less compared to zero for the U.S. sample.6

The relative small size of the Japanese firms is not accidental. There is a keen recognition of the value of controllable size and of focus. There are conglomerates in Japan, but care is taken to break individual businesses out into autonomous units with their own product/market mix and, importantly, individualized management right up through the board of directors. Corporate entities are thus kept to manageable sizes.

The impact of size on implementation effectiveness cannot by overempha-sized. An important way in which it occurs is in greater difficulty in mobilizing the human resources of the firm toward some end. Larger numbers
means greater problems in coordinating effort, keeping people informed, gaining and maintaining commitment, monitoring progress and most other aspects of the mechanics of implementation.

Equally important, but not as obvious is that finding approaches and techniques with pervasive applicability becomes more and more difficult with increased size. Since size is a significant component of organizational complexity, firms tend to become more diverse as they grow. Sub-units of firms facing different environmental conditions, often require different management responses. Very large firms often will not have enough inter-unit similarity to make widespread use of a given idea/strategy feasible or appropriate.

Although the discussion here has focused on U.S.-Japan comparisons, one might make the same argument for comparisons of firms within the U.S. Thus the conclusion of this segment might be generalized by saying that: everything else equal, smaller firms will gain competitive advantage from easier implementation of decisions, ideas, strategies etc. Since U.S. firms tend to be larger than their Japanese counterparts, an international competitive disadvantage occurs here.

DECENTRALIZATION

The gist of the decentralization issue is summarized in two observations; first, that the wrong kind of decentralization hinders implementation efficiency, and second that the preoccupation with individual manager autonomy characteristic of U.S. firms, is an arch-enemy of corporate strategy implementation. A case in point is the experience of General Electric in the 1970s with their divisionalized organization structure. Among the complaints with the structure, which was large and very diverse in addition to being highly decentralized, were the following:
"... corporate management in the decentralized structure had no control over the divisional strategies until after an outstanding success or absolute failure had occurred."

"The corporate-level executives were also dismayed by their inability to influence the strategy of the product division competing in the main-frame computer market." 7

Evaluation of the decentralization issue in the context of Japan-U.S. implementation comparisons, requires attention to two closely allied questions: (1) are Japanese firms more or less centralized than U.S. firms? and (2) all things considered would U.S. firms be more competitive if they were more centralized?

Research on the first question has produced conflicting results with some studies concluding that U.S. firms are more decentralized and some concluding no difference. 8 My analysis of this issue suggests that the difference between the two countries, and also the reason for the contradictory research results rests in different "forms", as opposed to amounts, of decentralization. Related to this are the important issues of how firms in the two countries define strategic versus operational decisions and basic differences in organization structure. Kenneth Ramsing's insightful analysis of decision areas for formation of manufacturing strategies points out that Japanese firms tend to take a much broader view of what is "strategic". For example, they recognize that workforce management and quality control are strategic components whereas they are often treated as tactical by U.S. managers. 9 Through the Ringi system, the Japanese corporations permit broad participation in the making of "strategic" decisions. The broader base of participation will produce often noted implementation advantages through greater acceptance of,
and commitment to, the decision by those who have to perform follow-through tasks.

By contrast, U.S. firms typically define strategic decisions more narrowly and limit participation in such decisions to top management personnel. A reasonable interpretation of this approach is that fewer people participate in fewer strategic decisions. From this perspective, overall decentralization is greater in the Japanese system.

On the other hand, it should be noted that while the Japanese system features broad-based participation, top management has not abdicated authority for these decisions. The more generic meaning of "strategic" leads to greater involvement of top management in matters that traditional Western practice defines as "operational". In addition, strategic ideas often initiated at lower levels must ultimately be approved by top management.

Also related to the decentralization issue is that U.S. firms are far more likely to adopt divisional designs than are Japanese firms. One study places the use of divisional structures (among the largest corporations) at 94% in the U.S. versus 59% in Japan. In addition, research shows that where business units do exist in Japan, unit managers do not receive as much autonomy as is true in the U.S. A third structure difference is that in many Japanese firms, divisions include only sales and engineering, with manufacturing reporting directly to the President. ¹⁰

The upshot of these structure differences is that while the Japanese firm would permit greater involvement of lower level managers in making a broader range of decisions than U.S. firms, they have better control at the top over whether or not, and how individual units of the firm will implement the new management initiative. In this respect, the Japanese system can be viewed as more centralized.
In terms of implementation facilitation, the Japanese approach to decentralization seems to offer several advantages. Already mentioned are the benefits of broader participation in deciding what to do and how to do it. In addition, the involvement of lower level managers in a broader range of decisions should increase the ability to anticipate and plan for implementation problems which might have been overlooked if participation were restricted to managers at levels more remote from the point of implementation.

Even if changes in the form of decentralization will facilitate implementation, it is not immediately clear whether this advantage outweighs the potential disadvantages of the implied changes. For example, involvement of more people in forming strategic plans will lengthen decision time. Another significant issue is whether American managers are as willing to sacrifice some individual decision-making autonomy. Moreover, will a change in the degree of decentralization result in a loss of individual initiative which outweighs implementation benefits? Suggestions on how U.S. firms can be more effective implementers with very tolerable losses of the benefits of traditional forms of decentralization will be offered in the section on improving implementation effectiveness.

INTEGRATION MECHANISMS

Another aspect of the implementation edge of Japanese firms issues from the availability of several integration mechanisms which have limited or no U.S. parallel. The most significant of these mechanisms have been identified by William Ruch in his discussion of Japanese and U.S. intra-organizational communication patterns.11

The most prominent of these mechanisms, and the only one that is uniquely Japanese is the Ringi system. The system is a method of seeking
consensus for decisions through circulation of proposals for action. The proposal document itself is called a ringisho. Ringi provides an important means of both vertical and horizontal integration. Significantly, the vertical communication features both upward and downward information flow. The horizontal coordination and approval process entailed in preparation of the ringisho is a primary reason for Ruch's conclusion that horizontal communication is much stronger in Japanese corporations than in U.S. counterparts. Since Ringi is expressly intended for those decisions that require a high degree of inter-group coordination, it has great value for implementation facilitation. Although a few U.S. firms, notably IBM, have idea circulation systems that approximate Ringi, it has no parallel in the vast majority of U.S. firms.

Less notorious than Ringi but perhaps just as useful for implementation facilitation is the system of informal cliques of Japanese corporations called "Habatsu". According to Ruch, the U.S. corollary might be the grapevine but there are important differences as he points out. First, Habatsu groups more frequently mix hierarchical levels. This makes them more useful for integrating vertically. Second, and more important, they are more institutionalized, often brought into planning and decision making processes at management's initiation. Indeed, in some cases, "approval" by habatsu is required before a new policy can be implemented. Thus there is much more assurance of a role for this mechanism in formal action by management than is typically the case with U.S. informal groups.

Although opinion surveys and suggestion systems are both common in the U.S., they are manifested differently in Japanese firms. In U.S.
companies, surveys of employee views are usually done at infrequent intervals and mostly by outsiders (e.g., consultants) as an ingredient of an organization development effort. By contrast, many Japanese firms routinely conduct such surveys as a means of staying in touch with grassroots perspectives and enhancing the vertical communication flow. By this means, potential obstacles to implementation are more readily identified in a timely way. The same is true for suggestion systems which are more intensively used in Japanese firms.

Joint Councils are groups of management and non-management employees who meet regularly to address issues of mutual concern. Such councils exist in the U.S. (e.g., Gravely International is using them in their manufacturing facility) but are not as prevalent and according to Ruch, the U.S. versions have different missions or are formed with different motives in mind. Joint councils are prevalent in Japan and have the explicit goal of "improving the harmonious running of the business". By contrast, it is instructive to note that even in U.S. companies where non-management employees hold majority ownership (ESOPS) they are represented on the board of directors in less than 25% of the firms.12

In sum, there are substantial inter-group, inter-level integration mechanisms available in Japanese corporations which have no true counterpart in most U.S. companies. Since vertical and horizontal coordination is critical to successful implementation of strategic initiatives, this is another important piece of the Japanese implementation advantage.

PERSONNEL TURNOVER

One of the most basic requirements of successful implementation is that the management leadership behind the ideas stay in place long enough to
follow-through on necessary actions for implementation. In this regard, U.S. firms suffer from excessive turnover of personnel at all levels of the hierarchy resulting in a discontinuity of leadership which severely hampers implementation. Employees turnover even at lower levels is important to implementation effectiveness because of the need for operative employees who are both well informed and committed to a particular program or approach. Turnover necessitates repeated efforts to get personnel to buy into the course of action as well as training to provide requisite knowledge.

There is empirical evidence of higher inter-company turnover rates of both management and non-management personnel for U.S. versus Japanese firms. For example, on a study of 227 U.S. and 291 Japanese firms among the largest 1,000 of each country, researchers found that both managers and technical personnel had significantly less inter-firm mobility in Japan versus the U.S. On a 7 point scale, mobility in Japanese firms rated 1.78 and 1.97 for managers and technical experts respectively compared to 3.46 and 3.45 for U.S. firms. In addition, they found a significantly higher agreement (for Japanese versus U.S. managers) with the belief that managers would not leave the company even if a higher position were available elsewhere. Also, in a study of 450 U.S. and 911 Japanese production, sales and management employees, the Japanese Productivity Center found that nearly 90% of the Japanese respondents had been with the same firm all their working lives compared to only 29% for the U.S. respondents. Also, 28% of the U.S. respondents had changed companies 3 to 5 times compared to around 1% of the Japanese respondents. 13

It should be noted that the Japanese do move people around internally. Lateral moves are often used to round-out managers for future promotion and to promote flexibility to perform multiple jobs at lower levels. As the above summary suggests, most of the available empirical data on comparative turnover
rates do not address intra-firm movement. Since U.S. firms also engage in substantial lateral movement of personnel, it is not clear that this form of turnover is higher in one country versus the other. Even so, the difference between inter-firm and intra-firm turnover is significant in this context. Personnel moved internally remain committed to overall company well-being and are available to assist their replacements with implementation if needed. In general, the likelihood of follow-through on ideas is greater if the originators are still with the firm. Moreover, many internal moves are promotions placing the initiators of ideas in an even better position to follow-through. Finally, it should be noted that higher inter-company movement often means higher intra-firm turnover as well since vacancies created by the former are largely filled by the latter. It therefore seems reasonable to conclude that patterns of personnel turnover in the two countries suggest that a more favorable environment for implementation of decisions exists in Japanese corporations.

TIME FRAMES FOR DECISION MAKING

Also contributing to the comparative inability of U.S. firms to implement strategies for improvement is the prevalence of a short time horizon for planning and decision making. Several writers have noted that in contrast to the U.S. tendency to adopt a short-term view, Japanese managers more often take a long-term approach to decision making.¹⁴

This difference is of importance to implementation effectiveness because the long term perspective increases attention to potential implementation obstacles as strategies and decisions are being formulated. Managers with a long term horizon are more likely to think-through consequences and likely reactions to changes even if their occurrence is not imminent. This conclusion is supported by Pascale and Athos who conclude, based upon extensive
cross-cultural research, that U.S. decision making styles "...often prompt
managers to choose prematurely, based on conceptual analysis and substantive
merit but without due regard for implementation feasibility".\textsuperscript{15}

The short-term orientation of U.S. managers tends to be reinforced by
human resource management systems which feature reward systems based on yearly
profitability (e.g., executive bonuses) and extensive shuffling of personnel.
It is not unusual in many large U.S. corporations for certain 'fast-track'
managers to move every 2 years. This leads to a natural tendency to favor
those actions which promise the maximum short-term benefit. Few are willing
to risk personal responsibility for mediocre results in the short-term in
order to create long term benefits for the company which are likely to occur
after he/she has left the position. The higher rate of inter-company turnover
also feeds into this by creating the philosophy that managers may have moved
on by the time negative consequences of their decisions occur, and thus their
careers will not be adversely impacted.

INTRA-FIRM DIVERSITY

The final dimension of the Japanese edge in decision implementation to be
discussed here occurs due to a lower rate of intra-firm diversity. Although
there has been recent discussion of mounting pressures for Japanese firms to
be more diversified,\textsuperscript{16} the success of Japanese industry has been built up in
part through maintenance of a keen sense of focus, within a given corporate
system, on rather narrowly defined product/market segments. Japanese firms
tend to be more specialized than their U.S. counterparts.\textsuperscript{17} In a rare empiri-
cal study addressing the issue of product/market diversity directly, researchers found that: (1) Japanese firms scored significantly lower than U.S. firms
on measures of product and geographic diversity (2) U.S. firms were signifi-
cantly more likely to have pursued an aggressive policy of new-business
These findings support the contention of lower diversification by Japanese firms.

As the G.E. experience cited earlier attests, greater intra-firm diversity is a hindrance to firm-wide implementation. Different markets require different organizational response systems making it unlikely that a given management technique will have effective applicability across organization units. Product/market diversity is also related to the decentralization issue. Distinctly different segments often call for separate and autonomous business units each with its own management team. Strategies will likely be defined differently by each team.

The secret of the Japanese firms' facility for implementation lies partly in their conscious effort to limit intra-firm diversity. Robert Hayes has noted the great lengths to which some Japanese firms have gone to avoid high product and process diversity in a single manufacturing facility. Proactive steps must be taken by U.S. firms if this and the other sources of implementation advantage are to be eliminated.

TOWARD EFFECTIVE STRATEGY IMPLEMENTATION

Implicit in the foregoing analysis of factors underlying the U.S.-Japan difference in implementation efficiency are several directions for changing management practice. A summary of these directions along with some thoughts on how they might be accomplished follows.

- The size of corporations must be controlled as smaller, more focused firms are more readily managed toward performance excellence. Greater utilization of size related control measures such as sales/employee and profit/employee should be made to reduce the incidence of "unnecessarily" large businesses. Corporations which get too large (a benchmark might be
100,000 employees or a sales/employee ratio of less than $250,000) should be reorganized into separate autonomous subsidiaries each with its own board of directors. The aim of these changes is to create organizational boundaries under a given corporate strategy which are manageable from an implementation perspective.

Decentralization may need to be approached differently with broader definition of "strategic" issues (and hence more top level attention to operational decisions with strategic implications), coupled with more direct input from middle and lower level managers on strategic direction, reduced emphasis on individual manager autonomy, but more attention to consensus building, and more rigorous follow-up to ensure that planned "corporate-wide initiatives have in fact been put into practice in every appropriate unit of the firm." Broader participation in planning by more managers at reasonable cost should be facilitated by recent developments in teleconferencing and micro-computer networking. Finally, U.S. versions of corporate divisions might better be spun off as subsidiaries each with its own corporate-level strategy. This would give the appropriate level of authority to heads of multi-functional units while at the same time recognizing the unique product/market environments confronting these units. Both results should facilitate firm-wide strategy implementation.

In order to enhance integration mechanisms greater use should be made of informal groups, joint-councils, employee suggestion systems and surveys. Non-management personnel on boards of directors as well as standing committees (at lower levels) composed of management and non-management personnel should be common place. Suggestion systems might include
commitment to try a set minimum of ideas (e.g., at least 15%) and liberal
(40-50%) sharing of any resultant cost-savings or revenue enhancement.
Employee opinion surveys should be done at regular intervals such as
every three years with guaranteed feedback to participants.

Employee turnover must be reduced by fewer company initiated lateral
moves of managers, more attention to employee retention and expanded use
of guaranteed employment. The minimum tenure in a position for middle
managers should be 3-4 years, for senior managers 5-7 years. Exit inter-
views should be conducted with every employee who resigns with feedback
of the information throughout the management hierarchy, and stock owner-
ship and profit sharing plans (both happily on the increase now) should
include all work categories as they give employees a financial stake in
the company's future prosperity. In using guaranteed employment, con-
cerns over conversion of a variable cost to a fixed one are addressed by
limiting eligibility. For example, Lincoln Electric has demonstrated
that requiring as little as two years of seniority can provide a 20%
force-reduction flexibility. 22

Time Horizons for decision making must be lengthened so that even long-
term obstacles to implementation are given due attention in the planning
process. One approach is to alter control measures to emphasize long
term results. For example, growth rates as opposed to ROI for a given
year. In general, financial performance measures such as ROI, net-worth
growth etc., should be looked at "over-a-period-of years" (OAPoy). Even
operations measures such as productivity and quality/service could be
evaluated on the "OAPoy" method. Also, management rewards could be
g geared to these longer range measures. Bonuses and the like should be
based on bi-annual or tri-annual performance. Longer tenure for managers in a given job as discussed earlier is closely allied with these suggestions.

- Intra-firm diversity which "merger mania" has only served to increase is a difficult area in that consolidations of firms are often formed in the interest of efficiency improvement and in some cases as a matter of survival. On the other hand, when conglomerate diversification (combinations of firms with dissimilar product/market areas) occurs, these 'efficiencies' are often illusory. Corporate leadership and, if necessary, governmental regulatory agencies, should strongly discourage mergers and acquisitions which have the effect of either diversification into unrelated product/market areas or the creation of excessively large single-business firms.

CONCLUSION

The ability of U.S. industry to successfully compete on world markets is being severely hampered by chronically inept implementation of strategies and management improvement techniques. Good ideas are often not used on a sufficient scope or sustained over a sufficient period of time to produce competitive advantage. This paper has compared U.S. and Japanese corporations on six dimensions thought to underlay the U.S. disadvantage in strategy implementation proficiency. Many of the causes of implementation paralysis discussed here are ingrained in the fabric of management practice of U.S. corporations and will not be easily changed. However, with the possible exception of the time-frame-for decision making aspect, which is due in part to cross-cultural differences in corporation ownership, change on these issues is within the authority of top management. What is needed is a resolve among our corporate
leaders to institute fundamental changes in the way we manage our large businesses along the dimensions described. Some preliminary suggestions were offered here for changes in the six dimensions of management practice toward curing "implementation paralysis". Many of the remedial ideas have merit for other reasons and have been prescribed in other contexts, but an effort has been made to show that they are also critically related to strategy implementation, a link not stressed in other writings. Addressing some of the issues raised may require radical changes in the way we think about strategic planning and other fundamental management policies, but attention to these issues is vital to improving international competitiveness.
NOTES


2. For more detail on this analysis of the work team concept, see "Management Discovers the Human Side of Automation", Business Week, Sept. 9, 1986, 70-75.


5. For example both Elwood Buffa (see Note 1) and Richard Schonberger (World Class Manufacturing, 1986 New York: The Free Press) make this observation.


8. For research and opinion relevant to this issue see Kagoma Nonaka, Sakakibara & Okumura and Lincoln, Hanada & McBride (both referenced in Note 5). Also, see Pascale's study (Note 4) and Masumi Tsuda, "The Future of the Organization and the Individual in Japanese Management", International Studies of Management & Organization, 1986, 15, 89-125.


10. For this data and a discussion of the divisional versus functional form issue see Kagoma et al. (Note 6) pages 40 and 99-105.


13. Data for item 1 in this section is contained in the study by Kagona and others (see Note 6). The report of the Japanese productivity center is published in Managerial Behavior in Japan and the U.S.A., Japan: Japan Productivity Center, 1984.

14. Among the writers reporting this conclusion are Kagona et al. (Note 6); A. Melcher and B. Arogyaswamy, "Decision and Compensation Systems in the United States and Japan: Contrasting Approaches to Management", in Management by Japanese Systems (Note 9); and Managerial Behavior in Japan and the U.S.A., See Note 11.


19. See R. Hayes, Note 17.

20. According to research of 15 key industries in the U.S. and Japan, sales/employee average $253,000 in the large Japanese firms. Thus U.S. firms must achieve this level to be competitive on this measure of size and efficiency. For details, see Kagona et al., item 6 above.

21. Something very similar to the form of decentralization suggested here has been implemented at Fujitsu of America. For a discussion of this application readers are referred to the article by Art Gemmel; "Management in a Cross Cultural Environment: The Best of Both Worlds", Management Solutions, June, 1986, pp. 28-33.