# What Makes a Company Perform Well? —A Recent Survey—

By Hiroshi Kasai

A broad list of factors with bearing on corporate management might include top management, organization, product strategies, technology development, finance, and relation to outside firms, with possible further subdivisions within these categories. The policies that companies have taken in connection with these factors are themselves of great intrinsic interest and have been the subject of many surveys.

Even more interesting, however, is the question of which factors make for strong corporate performance. Since 1974, the Ministry of International Trade and Industry has conducted questionnaires in an effort to establish empirically, using quantitative and financial data, the extent to which permanent management factors contribute to, or affect, performance in Japanese corporations. The method employed is Quantitative Analysis for Qualitative Factors (QAQF), a method developed jointly by MITI and Keio University. This article presents the results of a recent study of manufacturing and retailing industries. For reasons of space, however, retailing has been omitted.

### **Analytical methods**

A questionnaire was mailed to 1.090 manufacturing companies listed on the first and second sections of the Tokyo and Osaka stock exchanges in January 1984. Some 505 companies (46.3%) responded to the questionnaire, which contained 99 items, each divided into several response categories. For example, the item Career of President had four categories (1) founder, (2) successor, (3) through the ranks and (4) brought in from outside, i.e., amakudari (former top bureaucrats taking up private sector jobs on retirement). Respondents marked one category. By totaling the responses it is possible to gain an idea of the status of individual factors.

Financial data on responding organizations was also collected in order to evaluate their performance. Growth (sales growth) and profitability (ratio of profits to total capital employed) were each assessed on a five-point scale, for a maximum total of 10 performance points. The points were then averaged for each response category. In the case of Career of President, for example, the highest score, an average 5.366, was recorded by companies operated by their founders. the lowest by those run by amakudari presidents, with an average of 4.871 (Fig. 1). Companies operated by their founders thus appear to do better on the whole than those with amakudari presidents. In this manner one can determine which individual items make companies perform well or badly.

It is also possible to determine the degree of contribution to performance for each item using the difference (*D*-value) between the highest and lowest performance points. In Career of President, the *D*-value was 0.495, while that for Pattern of Executive Decision-Making was 0.278 (Fig. 2). The president's career has a relatively large impact on performance, whereas the pattern of executive decision-making does not.

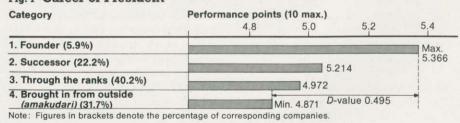
Although *D*-values can be employed to determine quantitatively what factors significantly affect performance, they do not always indicate a causal relationship. Nonetheless, many of the causal expla-

Table Twenty Management Factors Affecting Performance

Factor	Item	D-value	Rank
Top management	Company strength	0.874	11
	Business goals	0.844	12
	Overseas strategy	0.802	13
	Average age of top management	0.701	18
	Outlook on business environment	0.675	20
Organizational	Average length of service of male employees	1.058	6
	Wage levels	0.878	10
	Human resources development	0.726	14
	Motivation	0.717	15
	Computerization	0.704	17
Technology development	Ratio of research spending to sales	1.384	2
	Level of applied research	1.092	4
	Level of basic research	1.042	7
Product strategy	Ratio of new plant and equipment	1.439	1
	Operating ratio	1.147	3
	Ratio of microcomputer-controlled equipment	1.066	5
	Ratio of new products	0.970	8
	Selling point of main products	0.707	16
Financial	Funding for fixed investment	0.953	9
Relation to outside firms	Dependence on outside contractors	0.682	19

Note: Rank is descending order of D-value.

Fig. 1 Career of President



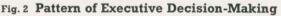
Hiroshi Kasai is deputy-director of the Business Behavior Division of the Ministry of International Trade and Industry's Industrial Policy Bureau, He joined MITI in 1977.

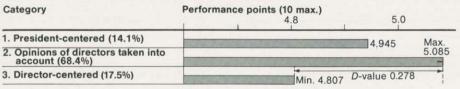
nations below are persuasive in that they correspond to prevailing business theory in Japan on the empirical experience of managers.

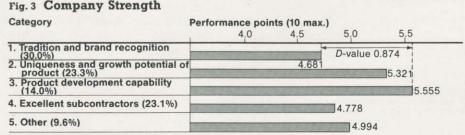
### **Twenty major factors**

The table shows the top 20 items with large D-values, i.e., where there is a strong correlation between performance

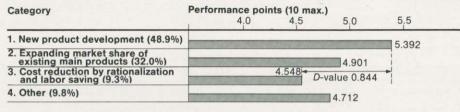
and factors. Top management, organizational, and product strategy factors are best represented, with five items each, Dvalues are particularly large for technology development and product strategy factors. The following are some features of firms that do well:







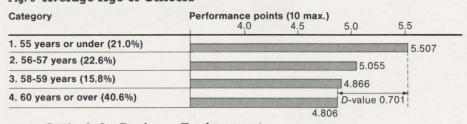
### Fig. 4 Most Important Business Goals



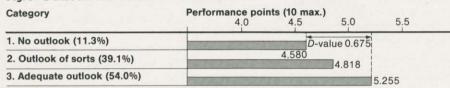
### Fig. 5 Overseas Strategy

Category	Performance points	(10 max.) 4 <sub>;</sub> 5	5.0	5,5
Most exports through trading companies (43.4%)			14.705	
2. Most exports through foreign marketing subsidiaries (19.4%)				5.335
3. Expansion through production abroad (25.7%)				5.462
4. No overseas strategy (11.5%)			0.0 D-value	802
		4.660		•

### Fig. 6 Average Age of Officers



### Fig. 7 Outlook for Business Environment



### Fig. 8 Average Length of Service of Male Employees

Category	Performance points (10	<b>max.)</b> 5	5.0	5.5
1. Less than 14 years (33.2%)				5.644
2. 14-less than 18 years (34.3%)			1.816	0.01
3. 18 years or more (32.5%)	4.58	6-	value 1.058	-

### Strength in product development (Fig. 3)

Many companies believe their strength lies in their tradition, reputation, or brand. In fact, performance is worst in this type of firm. The best performers do not rest on their laurels but aggressively develop new products.

### New product development a business goal (Fig. 4)

The importance of new product development is also clear from the item Main Business Goals. Our survey indicates that firms citing new product development as their main goal have maintained good performance during periods of both high and low economic growth. Since it requires a complete change in thinking, new product development fosters the development of employee abilities and creativity.

### Investment in overseas production facilities (Fig. 5)

Although the overseas strategies of the overwhelming majority of companies consist of exporting rather than local production, a growing number of companies is opting for local production. This latter group is performing well.

### Youthful top management (Fig. 6)

The younger the average age of its officers the better a company's performance. Flexibility of ideas and responses is of mounting importance in today's swiftly changing management conditions.

### Adequate outlook on the business environment (Fig. 7)

Management must be able at all times to respond to changes in the corporate environment. However, clear management policies cannot be formulated without an adequate outlook for the future. Firms with a clear view of prospects are doing well.

### Short average length of service (Fig. 8)

The shorter the average length of service of male employees, the better a firm's performance. Japanese firms tend to recruit more new graduates when they are growing rapidly, thus pushing down the average length of service. Younger employees are paid relatively low wages and are diligent and flexible.

### High wage levels (Fig. 9)

The higher the wages the better for employees. In practice, it is less the

absolute value of wages than their relationship with wages of competitors in the same industry that motivates employees and ultimately boosts perform-

Fig. 9 Wage Levels

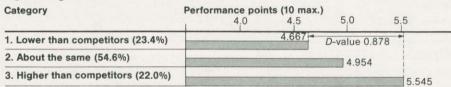
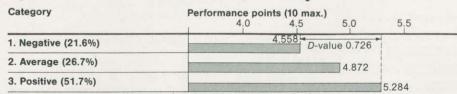


Fig. 10 Attitude toward Human Resource Development



Note: Attitudes are measured in terms of number of human resource development programs adopted: negative, 2 or less programs; average, 3-4 programs; positive, 5 programs or more

Fig. 11 Attitude toward Employee Motivation

Category	Performance points (10 max.) 4.0 4.5 5.0 5.5
1. Negative (19.8%)	4.521 D-value 0.717
2. Average (35.8%)	5.018
3. Positive (44.4%)	5.238

Note: Attitudes are measured in terms of number of employee motivation programs adopted; negative, 7 or less programs; average, 8-9 programs; positive, 10 programs or more

Fig. 12 Attitude toward Computerization

Category	Performance points (10 max.) 4,0 4,5 5.0 5.5
1. Negative (21.4%)	4.539 D-value 0.704
2. Average (25.9%)	4.952
3. Postive (52.7%)	5.243

Fig. 13 Ratio of Research Spending to Sales

Category	Performance points (10 max.) 4,0 4,5 5,0 5,5
1. Less than 1% (24.1%)	4.656 <i>D</i> -value 1.384
2. 1%-less than 2% (25.9%)	4.716
3. 2%-less than 4% (28.3%)	15.104
4. 4% or more (21.7%)	5.88

Fig. 14 Level of Applied Research

Category	Performance points (10 max.)						
	1	4.0	4.5	5	.0	5.5	
1. Hard to catch up (36.6%)				4.709 D-value 1.0		1.092	
2. Can catch up quickly (49.5%)					15.025		
3. Can catch up immediately (13.9%)					30.020	5.801	

Fig. 15 Level of Basic Research

Category	Performance points (10 max.)					
	1	4,0	4.5	5.0	5.5	
1. Lower than competitors (25.9%)	4.715 <i>D</i> -value 1.0				ue 1.042	
2. About the same as competitors (58.7%)			14	4.955		
3. World-class (15.4%)	-				5.757	

ance. Or, it may be that companies can afford to pay high wages because performance is good.

## Active interest in human resource development and motivation improvement (Figs. 10 and 11)

Firms offer various development programs for their employees, including subsidies for correspondence education and lectures, training programs, result management by self-reporting, university study at home and abroad, and dispatch to other organizations. Measures to improve motivation include five-day work weeks, employee stock-ownership programs, company housing, private pension schemes, and recreational activities for employees' families. The more of such measures companies adopt, the better they perform.

### Active use of computers (Fig. 12)

Computers are taking root in industry, playing a major role in reducing monotonous tasks, cutting costs, and otherwise improving the efficiency of operations.

## High ratio of research spending to sales (Fig. 13)

This item has the second largest *D*-value after new fixed investments. Research and development are clearly vital in today's keen competition to innovate technologically and maintain a technological lead. Firms with a ratio of research spending to sales of 4% or more were particularly strong performers.

### High research levels (Figs. 14 and 15)

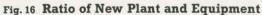
Companies that believed their research levels to be higher than those of competitors turned in good results. This was true of both basic and applied research. It is worth noting that although Japanese companies are reputed to lag in basic research fields, slightly more companies replied that they had a high level of research in basic fields than in applications.

### Introduction of new equipment (Fig. 16)

The active introduction of new plant and equipment enhances the production technology, reduces costs, and raises product quality. The higher the ratio of new plant and equipment (introduced in the past three years) the better a company's performance. The *D*-value for new equipment was the greatest for all items examined.

### High operating rates (Fig. 17)

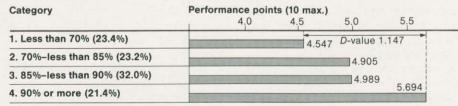
High operating rates also showed a high *D*-value, confirming that the



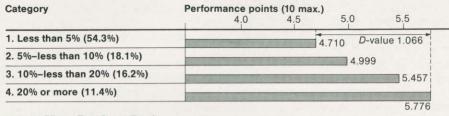
Category	Perfor	mance poir	nts (10 max.)	5.0	5.5	
		4,0	4.5	5.0	3.3	
1. Less than 20% (44.8%)	10000		4.567	D-val	ue 1.439	
2. 20%-less than 30% (25.9%)	100			5.1	41	
3. 30%-less than 40% (15.4%)				15	225	
4. 40% or more (13.9%)						6.006

Note: Percentage of plant and equipment purchased in the past three years

### Fig. 17 Operating ratio



### Fig. 18 Ratio of Microcomputer-Controlled Equipment



### Fig. 19 New Product Ratio

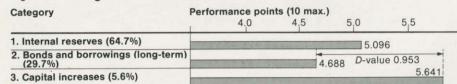
Category	Performance points (10 max		
	4,0 4,5	5.0 5.	5
1. Less than 10% (49.3%)	4.652	D-value 0.970	•
2. 10%-less than 20% (22.2%)	ROBERT PROPERTY OF THE PARTY OF	5.051	
3. 20% or more (28.5%)			5.622

Note: The new product ratio is new products developed and sold during the past three years as a percentage of present total sales.

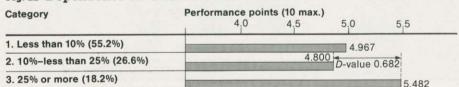
### Fig. 20 Selling Point of Main Products

Category	Performance points (10		5.0	5,5
1. Technological uniqueness (39.1%)		No. of Street, or other party of the		15.309
2. Brand (13.7%)		14.69	1	
3. Price (10.9%)	4.60	2	ue 0.707	
4. Functional design (23.8%)		D-val	4.957	H
5. Design, other (12.5%)			4.930	

### Fig. 21 Funding of Fixed Investment



### Fig. 22 Dependence on Outside Contractors



Note: Dependence on outside contractors is the ratio of subcontracted processing costs to total production costs.

rates have a major bearing on corporate performance.

### Introduction of microcomputers (Fig. 18)

Like new plant and equipment, the introduction of microcomputer-controlled equipment not only boosts productivity, but makes possible flexible production in small runs. Despite the drawback of lower worker morale, automation is highly significant in boosting company results.

### High proportion of new products (Fig. 19)

The fruits of technology development appear in the form of new products. By the same token, companies' new products are the outcome of their technology development efforts. Companies with new product ratios of 20% or more registered extremely good performances. The higher the new product ratio, the more incentive for employee creativity.

### Unique technology a selling point (Fig. 20)

Companies that cited unique technology as the principal selling point of their main products gained high performance points; those that cited prices and brands fared poorly. It is now difficult for companies to distinguish their products by brand and prices alone; technology is vital.

### Importance of internal reserves (Fig. 21)

Only one financial item, funds for fixed investment, showed a large Dvalue. During the rapid economic growth in the 1960s, companies tended to depend heavily on borrowings to finance investment in plant and equipment. Under today's lower, more stable growth, however, more companies are utilizing capital increases and internal reserves. Firms of this type tend to perform better than others.

### High dependence on outside contractors (Fig. 22)

Dependence on outside contractors is heavily swayed by the economic climate, and no consistent relationship between dependence and performance was observable. However, companies reporting a dependence of 25% or greater performed well.

### Conclusion

Overall, items related to technology and products contribute greatly to performance. In this climate of rapid technological advance, Japanese manufacturing industries are actively developing new products and new technologies and significantly enhancing their performance.