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ABSTRACT

There still remain many unclear aspects concerning the process of strategic adaptation of a company. The dynamism of growth of a small company in argued as an important adaptation process to survive. Through the review of two dominant approaches, Penrose-Chandlerian approach and the corporate life cycle approach, growth is assumed as the followings: (1) the company growth is a dynamic organizational process that amalgamates, creative top leadership, mobile resources and innovation-oriented organizational behavior, (2) it must be pursued consciously as a strategic behavior to adapt contingencies within and around a company, (3) it is a sequence of discontinuous stages, (4) a company grows evolutionally by incremental changes and grows revolutionarily by strategic leaps. The empirical study partially supports the validity of these assumptions, and finds that Japanese companies have a clear growth orientation since small sized level, and that the growth is not only a goal of a company but also a process of opportunity creation. These things are integrated into a hypothetical model of the growth of a small company.

INTRODUCTION

There seems to be a widely accepted understanding that the growth is indispensable for survival of company and usually coincide with employees' goals (Starbuck, 1965). This understanding results in the belief that the company growth can parallel the prosperity or progress of a society. On the other hand we cannot overlook the fact that some companies failed because of their enthusiastic pursuit of growth (Woodward, 1976 : Mckenna & Oritt, 1980 : Lauenstein, 1984). And there are some opinions from economists. They say that staying small is beautiful (Schumacher, 1973), or that there is a kind of limitation of economic growth caused by the scarcity of natural resources. Those opinions are related to the value judgment of growth stood on the view of economic policy. They will not directly contribute to an elucidation of growth process except

an explanation of a normative way of growth.

Although we attach importance to those discussions, our concern is a little different. We try to make clear how small companies are grown. The reasons why we are interested in the growth of small companies are the followings. One reseason is that only few empirical researches are concentrated on the small company growth (Miller & Freesen, 1984), while those companies are playing important roles in the economic development (Rothwell & Zegweld, 1982 : Birch, 1984 : Birley, 1986). We do not have enough information about the growth of small companies. The second reason is that the explanation of growth of small companies will be useful to enhance the rate of small companies' success. We think that a major reason of frequent failures of small companies will be attributed to the clumsy management of growth. We assume that the growth of company is a result of dynamic strategic process of evolutional expansion and revolutional leap rather than a result of successful performance. Success at one point will gradually generate novel issues that cause opportunities to shift existing strategic behavior to novel one. The shift of strategy will be depicted as a discontinuous and revolutionary transformation of strategic behavior, that is the strategic leap. Our purpose of this essay is to present a company growth model based on such assumptive explanation. We first make a review of antecedent studies to induce some assumptions for our growth model. Next a simple empirical research will be conducted to find some distinctive features of strategic behavior of small companies along these assumptions. Lastly we try to build up our model of company growth.

TWO APPROACHES TO COMPANY GROWTH

Firstly we start to review antecedent researches to know theoretical backgrounds of company growth and to make clear remaining important issues about it. We pay attention to two major approaches of company growth from antecedent studies. The first one is an orientation toward building of a general theory of company growth focused on causes of growth and structural transformations. The second one is the corporate life cycle approach which is mainly concentrated in descriptive explanation of growth process by using biological life stages.

(1) PENROSE-CHANDLERIAN APPROACH

Since the eminent study of entrepreneurship and innovation by Schumpeter (1934) many researches endeavor to find out the factors which will promote innovations of company, and make efforts to build up a theory of growth through innovation. Perhaps one of the most prevailed

explanations from this approach is Penrose's corporate growth theory (Penrose, 1959). According to Penrose's, the growth is a dynamic process which a company tries to realize productive opportunities by mobilizing productive resources. Here she considered that the essential nature of these resources, regardless of tangible materials and intangible human skills, is services. She grasped a company as a unity of administrative unit and productive resources. Company growth is clued by the productive opportunity, "which comprises all of the productive possibilities that its 'entrepreneurs' see and can take advantage of (p. 31)", is pursuited by an enterprise which "refers to individuals or groups within the company providing entrepreneurial services (p. 31)", and is determined by the availability of total services. The growth motivation of an enterprise is originated in long-run profits. She assumes that "the managers of firms to maximize long-term profits from investment in the enterprise itself (p. 29)", and that "the rate and direction to act upon opportunities for profitable investment (p. 30)".

We acknowledge her distinguished contribution to the establishment of the dynamic growth theory of a company which parts from the static equibrium theory of traditional economics, such as the theory of the economy of size. But her growth theory is too abstract and too general to be put to the practical use. We can point it still remains some unanswered research areas : how to mobilize those factors along the changing growth process and how to secure the richness of practical explanation by devising more factors or variables.

Needless to say, practical processes of company growth must not be all the same among companies. It is quite natural to postulate that the logic of growth will be contingent upon the situations resulted in expansion of each company. But conspicuous studies from economists based on such viewpoint are still few. This point of view is handed over to Chandler (1962). His seminal assumption, "structure follows strategy", becomes widely shared with researchers based on the contingency theory, such as Stopford & Wells (1972), Channon (1973), Galbraith (1973), Rumelt (1974), Galbraith & Nathanson (1978), Mintzberg (1979), and Miller & Friesen (1984). They developed the Chandlerian paradigm as an elaboration model of structures in behalf of the organizational adaptation to contingencies, and have fairly succeeded in discovering some important factors necessary to adaptation.

In spite of numerous fact findings, however, a number of studies with the exception of the aboves have tended to hardly treat the process of growth itself. Furthermore studies originated from the theory of bureaucracy, for example Blau & Schoenherr (1971), Pugh & Hickson (1976), and Hage (1980), go away from the Chandlerian paradigm. In terms of time dimension, they seem to overlook the importance of organizational process, and simply assume linear relationships between organizational structures and contingencies. Those result from their research methods (Miles & Snow, 1978 : Miller, 1981). Thus the growth does not occupy the main position of

research area of those contingency theory studies. To conquer those problems, the change of viewpoint will be needed.

Before discussing about it, what we can learn from studies based on the Penrose-Chandler model should be made clear. Penrose built the basic theory of growth and the Chandlerian approaches including the contingency theory developed multivariative relationships of organizations and contingencies. Now we can get two assumptions about the company growth from the above discussions.

Assumption 1 :

Company growth is a dynamic organizational process that amalgamates creative top leadership, mobile resources, and innovation-oriented organizational behavior.

Assumption 2 :

Company growth must be pursued consciously as the strategic behavior to adapt contingencies within and around a company.

(2) CORPORATE LIFE CYCLE APPROACH

We think growth itself should be extracted as a worthwhile phenomenon to study. The second approach is related to this point. The corporate life cycle approach sets up those dynamic processes as an object of study. By introducing the growth stage as an intervening factor into the relationship of organization and contingencies, we will not only be able to depict the dynamism of organizatinal adaptation to its contingencies but also get some different findings from the contingency theory. According to R. Quinn & K. Cameron (1983), the adaptation of organization to the external turbulence depends on its stage of development. Thus they found that under the same contingencies an organization will develop different structure along its growth stage.

The basic assumption of this approach is that a company should face different issues along its growth stages, which are divided from four to six, and a company will reach the maturity and or the declining stage of adaptability. Success of the former stage will lead a company to shift to the latter one (Lippitt & Schmidt, 1967 : Steinmetz, 1969 : Greiner, 1972 : Lavoie & Culbert, 1978 : Adizes, 1979 : Cameron & Whetten, 1981 : Quinn & Cameron, 1983 : Miller & Friesen, 1983 : 1984).

We can recognize at least two theoretical meanings of this approach : (1) the primary attention to internal corporate process and (2) the strategic revolutionary change. The first meaning implicates that the internal corporate development will clarify a strategy to be pursued

(Greiner, 1972). This is the opposite explanation of Chandlerian paradigm, and suggests a possibility to overcome the above mentioned limitations of the contingency theory. We expect that the corporate life cycle approach will contribute to an additional explanation about strategy making by an organizational emergence (Minztberg, 1978) or àn autonomous strategic behavior (Burgelman, 1983-a, b, c). But the truth is that there are few researches from this approach focused on such aspects. Of course we can hardly know the organizational autonomous behavior of small companies from the corporate life cycle approach. One reason of our research concern roots the fact of lack of such studies in this promising area.

The second meaning, that is the strategic revolutionary change, is a characteristic aspect of the life cycle approach. According to this approach (Greiner, 1972 : Miller & Friesen, 1984), the shift from one stage to another one is understood as the revolutional quantum leap rather than the evolutional continuous change. Such shift includes some types of radical change : transformation, reorientation, revitalization, and turnaround (Allaire & Firsirotu, 1985). However we try to integrate them into two types according to the orientation of top management's perception against the situations which their company will face or is facing. One is a distress change which is oriented to the problem solving caused by the negative feedback of performance. The other, innovative change, is opposite to it. The innovative change is triggered by the perception of creation of novel strategic issues or the percieved need of proactive destruction of the existing strategy under successful performance. This change result in creation of new growth opportunities. The corporate life cycle approach focuses on the innovative change. This type of change premises the active organizational behavior for innovation and its success. Such viewpoint of change can be thought the new development of Schumpeter-Penrose assumption : growth through innovation. Now we call innovative change for growth "strategic leap".

But all studies of the life cycle approach do not evaluate the importance of strategic change. Rather some of studies which stand on the growth model of biological organism hypothesize the declining or death stage of company (Adizes, 1979 : Quinn & Cameron, 1983). Penrose already warned against the danger of simple application of the growth model of biological organism as the following : "the most serious being the fact that human motivation and conscious human decision have no place in the process of growth (Penrose, 1959, p. 2)." It seems that those studies of corporate life cycle approach borrow only a curve of life of an organism. However we still remain two questions to them. One is whether that the curve will be the same of real company' s growth pattern or not. Miller & Friesen (1984) found out that the growth pattern of companies is not unilateral but multi-lateral. We should make efforts to depict various growth curves based on empirical researches while we can accept their growth curve as a loose hypothesis. The second question is on the assumption of declining or death stage. From the point of view that focuses

on organizational creativity through human innovative activities, the failure of company growth will be explained as a result of clumsy strategic behaviors although inevitability of decline or death should be beside the question. It should be careful that an overestimation of decline or death will compel the corporate life cycle approach to the self-defeating fatalism. Therefore we do not hypothesize the declining stage of company growth. Although there are other problems about the corporate life cycle model, such as a few of empirical studies (Miller & Friesen, 1984) or the lack of consensus to specification of stages (Quinn & Cameron, 1983), we can set the following assumptions from corporate life cycle approach.

Assumption 3 :
Company growth is a sequence of discontinuous stages.

Assumption 4 :
Company grows evolutionally by an incremental change and grows revoutionarily by a strategic leap.

RESEARCH METHOD

Our research is not suitable to study the growth process of companies because it is a typical cross-sectional one. But the merit of ours is that our data consist of various sized companies. We expect that by using this data we can make clear characteristics and differences of strategic behavior among various sized companies. These fact findings can be helpful to formulate our hypothetical model of company growth along the above assumptions.

We sent the questionaires to 1091 companies of which headoffices are located in nine prefectures in south west Japan in October 1983, and received the valid answers from 329 companies (30.2%). However, in order to attain the comparability of our analysis with other analysis, such as governmental statistics and the data base of T. kagono *et al* (1985), this analysis includes only the answers from manufacturing companies. Thus the number of samples becomes 206.

Following the preliminary statistical analysis, we visited about 30 companies. Through the interviews with top management we could confirm the reliability of their answers to our questionaires and got rich informations about their management practices. The fact findings from these interviews are suggestive to understand the results of statistical analysis. These facts will be used to describe the growth and innovation process.

We devided our data three groups according to number of employees. The first group

consists of small sized businesses which have less than 99 employees. We call this group S-group. The number of employees of the second group, M-group, are from 100 to 299. The last group is L-group, more than 300. The major characteristics of these groups are table 1.

Table 1 Characteristics of the sample by size

employees	N. of companies	means	S. D.
less than 99	93	58.73	22.04
from 100 to 299	80	169.94	51.90
more than 300	33	954.82	1404.99
sample-wide	206	245.47	638.92

DIFFERENCES OF STRATEGIC GOALS AMONG GROUPS

We began to investigate the difference of corporate goals among three groups. The company's recognition of strategic issues will be reflected in the priority of its goals. The result of analysis is table 2.

Table 2 Comparison of priority of corporate goals by size(1)

rate	S-group	score	M-group	score	L-group	score
1	Promotion of inter-organizational relationships	1.14	Increase in market share	1.24	Rationalization of operation	1.49
2	Increase in market share	1.13	Improvement of product portfolio	0.94	Increase in market share	1.21
3	Improvement of product portfolio	0.80	Promotion of inter-organizational relationships	0.91	New product ratio	1.03

(1) Means score of importance (3 points for the most important goal, 2 points for the second, 1 point for the third, and 0 point for others)

First of all it should be pointed that three groups have something in common. Every group highly ranks the goal of increase in market share. Even in S-group companies, of which survival seriously depends upon profitability, return on investment is ranked 6th (its score is only 0.53) : M -group also ranks 6th (0.53) and L-group does 6th (0.51). According to Kagono, *et al* (1985), the emphasis on growth is a distinctive feature of Japanese leading big companies as compared with U. S. companies. However, we can say some more that orientation toward the growth comes from small sized companies. This fact implicates that most Japanese companies will set the goal of growth as a core of strategic orientation as soon as they start their businesses.

But the table also shows the existence of some clear differences in priority of goals among groups. S-group companies attach importance to the reinforcement of their relationships with

their customers, parent companies, banks, and so on. It is quite doubtful for these companies to maintain their survival unless these relationships exist firmly. Although business feasibility heavily depends upon these relationships, we can not miss the adverse effect of deeep relationships. The heavy dependence of a small company on the specific relationship with bigger one causes imbalance of power. Small company will become limited their freedom of strategic decision making by bigger one. Thus the deeper the small company's dependence upon specific relationship, the more important is the effort to maintain its autonomy. How to deal with this dependence may be a critical point to shift to the next growth stage.

The M-group's first goal is the increase in market share, and the second one is the improvement of product porfolio. These goals suggest that M-group companies target on the market expansion by introduction of new products. It becomes important to enhance their capability of both strategic response and innovation in order to attract new customers and to win a competition with rivals. This market/innovation oriented activity will result in securing their autonomy. We assume that the size of company will increase rapidly through its innovative activities during this stage.

It is very interesting that L-group companies list a rationalization of production and distribution system as their first goal. And an increase in market share and a new product ratio follow it. Through interviews we can understand the reason why they make much of rationalization of operating systems. Accumulated resources and various products will cause a new problem. On one aspect L-group companies gradually increase the complexity of large-scaled production systems, on the other aspects they widely operate their marketing activities in various arears. Complicated and manifold information flows within and around a company need more elaborated managerial behavior. Thus the existing managerial systems become over-loaded (Chandler, 1962 : Galbraith, 1973 : Leibenstein, 1976). To deal with the inefficiency of management and to keep the organizational innovativeness seem inconsistent. This difficulty will result in a strategic issue of L-group.

As this result is based on the cross sectional data, we must take a prudent attitude to apply it to an individual company's growth. But it will be allowed to regard that the priority of company goal is different by its size because of changing strategic issues.

DIFFERENCES OF STRATEGIC BEHAVIORS

If the difference of orientation toward the goal is expected to lead a different strategic behavior, the differences of performance within the same group will result from their strategic behaviors adopted by each company. Thus a successful company will develop defferent strategic

Table 3 Comparisons of strategic behaviors[1]: t-test of means

SIGNIFICANT VARIABLES ABOUT STRATEGIC BEHAVIORS	SAMPLE-WIDE		GROUPS		
	HP-group	LP-group	S-group	M-group	L-group
Environment					
Intensity of rivalry	4.90	5.48**	(*)		**
Profitability of the principal market	3.84	3.43 (*)			(*)
Constraint of market location	3.95	4.23	*		
Constraint of resource procurement	3.37	3.86 (*)			*
Technology					
Newness of production facilities	3.41	3.00**		***	
Flexibility of production systems	4.00	3.51**		**	**
Centrality of core technology	3.93	3.50**		*	
Elaboration of skilled labor	3.92	3.60**		(*)	(*)
Strategy					
Degree of resource accumulation	3.71	3.42*	*		
Product/market innovation orientation	3.68	3.39 (*)		**	
Cost efficiencies orientation	3.50	3.57	(*)		
Pursuit of M & A	2.07	2.23			*
Pursuit of cooperation with rivals	2.82	2.96			(*)
Importance of business circle activity	2.85	3.36**			***
Leadership style of top management					
Consideration-oriented behavior	3.71	3.63		*	
Task-oriented behavior	3.85	3.68 (*)		**	
Value-oriented behavior	4.16	3.85**		***	
Information-oriented behavior	4.01	3.81*		***	
Statesman-oriented behavior	4.14	4.06		*	
Organizational features					
Emergence					
Willingness to take risks	3.52	3.22*		***	
Spontaneity at the lower level	3.29	3.08		*	
Accumulation of learning	3.53	3.06***		***	
Institutionalization of culture					
Reflection of values in every systems	3.95	3.65*		**	
Established uniqueness of management	3.55	2.97***		**	**
Identification					
Sense of identification with company	3.85	3.35***		***	**
Unwillingness to leave company	3.75	3.53		*	
Clearness of reward system	3.63	3.39 (*)		***	
Formalization of communication routes	3.66	3.40 (*)	(*)	*	
Autonoumous decisions at lower level	3.55	3.29 (*)		*	
Practical use of honor & skip over	3.64	3.36 (*)		**	
Acceptance of orders	3.66	3.37*		**	
Conflict resolution by authority	3.99	3.63**		**	
Conflicts among departments	2.47	2.77*			*

(1) The higher the mean score, the more typical is the strategic behavior.

(*) Significant at .10 level by t-test of means.

* Significant at .05 level by t-test of means.

** Significant at .01 level by t-test of means.

*** Significant at .001 level by t-test of means.

behavior from unsuccessful one's (Miller & Friesen, 1983).

Standing on a simple assumption of simple linear relationship between the goals and the strategic behavior, we conducted t-test of means of strategic behavioral variables. First, along the mean of performance score of each size group, companies were split into two groups: high performance group (HP-group) and low performance one (LP-group). Next we computed one way-analysis across these size groups and t-tests by each size group. Lastly variables that were signficantly different at less 0.10 level were picked up from the results. However in order to avoid complication of tabulation, only means of variables of the sample wide are indicated and asterisks are substituted for the results of t-test by group in table 3. Of course the means of variables of groups were different each other. But these differences were not so large, and a matter of importance was that they kept similar tendency across the size groups. Now let's check Table 3 in detail.

(1) STRATEGIC BEHAVIOR OF SMALL SIZED GROUP

Significant variables show two different facts between HP-group and LP-group. The first fact is that LP-group's means of scores in terms of environmental constraints and interorganizational strategy are higher than HP-group's. These variables mean that LP-group companies face the difficulty of establishing their autonomous strategic behavior because of high pressure from their market while HP-group companies succeed in locating their business on low competitive and promising domain. The first ranked goal of S-group, promotion of interorganizational relationships, clearly has weight with LP-group. This goal will not actively contribute to expand their market share or to bear extra market though it will be useful to stabilize competition within their business community.

The second fact is on HP-group. Companies of this group marked high scores against variables of technological flexibility and skill, identification, and managerial uniqueness. There seems to exist something of a common thread among these variables. We think it is the establishment of technological uniqueuness through human competence. As small companies usually lack a sufficient accumulation of managerial resources, they will be directed to create competitive edges by the usage of personal expertise or skills. However this way heavily depends upon the possibility of recruiting talented workers. It is not easy for these companies to get such workers under the condition of the closed labor market in Japan. Thus top management will cautiously create a sense of identification of employees with company and resolve conflicts among them so as to hold skilled labor forces for long time and to develop their talents. The leadership role of top management will become a creator of organizational atmosphere filled with high motivated employees.

Adherence to interorganizational relationships in LP-group and the development of creativity of the technological uniqueness based on human competence in HP-group are quite contrary facts of S-group companies. They can be understood unitedly that the overcoming through technological advantages will be a key for success of small companies.

(2) STRATEGIC BEHAVIOR OF MEDIUM SIZED GROUP

M-group companies show many significant variables in Table 3. These variables are summarized into three aspects: (1) the enhancement of technological capability including not only human skill aspect but also installment of the latest equipments/facilities, (2) the active leadership behavior of top management, and (3) the emphasis on both spontaneity and formalization of organizational process. However it is strange enough that most variables of the strategy except the product/market-oriented innovation did not show a significant difference. Contrary to Robinson *et al* (1984) it seems that the adaptation by the strategy or strategic planning will not play an important role yet at this size. These results indicate that how to vitalize the organizational dynamism rather than how to adapt to its environment through the strategy contributes to the performance of M-sized company. But is this understanding congruent with the M-group's goals, that is growth through market expansion? Or is this a specific characteristic of Japanese medium sized companies? We answer the following.

If we can think that most companies in M-group grow up from successful S-group, these companies will have relatively wide latitude of behavior in their markets as compared with S-group companies. On the other hand according to expansion of their size they will be laden with new problems in terms of the elaboration of management systems and the successive occurrence of innovation. Sooner or later they will face much difficulty in developing their product/market unless they can design such organizations as improve their information processing capacity and promote their flexibility and innovativeness without missing their integration. In other words M-group companies should achieve an ambivalent need of organizing in order to keep continuous growth through innovations. One solution of this issue is to realize the co-existence of organic system and mechanistic system. Application of autonomous activities at lower level, such as QC activity or Just In Time System, is a popular way to promote the orgnizational autonomy in Japanese companies (Archier & Sêrieyx, 1987). For QC activity can be understood not only as a device of improving the productivity but a way of promoting the organizational emergence by inserting an autonomous horizontal system (that is an organic aspect of organization) into a formal vertical system (mechanic aspect). To promote the emergence means that the organization should tolerate contradictions created by autonomous (not informal) activities at the lower. Of course the solution of this problem is not limited to QC. But we can say that the key for

success of M-group companies will considerably depend on the degree to which the leadership behavior of top management can develop an innovative organization to keep their continuous growth. Thus Japanese medium sized companies will concentrate on the organizational matters rather than the strategy formation.

(3) LARGE SIZED GROUP'S STRATEGIC BEHAVIOR

Only five variables were weakly significant in this group. Two variables about the environment are related to the selection of market. HP-group companies successfully defined their domain around the low competitive and high accessible market. Among elements of the strategy, the accumulation of managerial resources and the orientation of cost efficiency are significantly higher in HP-group than in LP-group(*). Lastly HP-group companies showed high score to the formalization of communication routes.

These results coincide with the priority of goal of this group : the rationalization of logistics and the market expansion through the product innovation. We can postulate that a problem of how to mobilize the managerial resources will become more important for a larger company. Here the mobility of managerial resources includes two sides (Itami, 1987). One is the resource utilization to fit the current strategy and the other is the resource accumulation for the future strategy. The resource utilization of growing companies will be related to the pursuit of efficiency of logistics or the advance of integrative management of managerial resources at the corporate level. On the other hand the resource accumulation will be connected to the market expansion through the product innovation. Because the accumulated resources, especially invisible ones such as skills, knowhow, or technological information, will contribute to the promotion of innovation process. Thus the enhancement of market futurity based on the integrative management of resource mobility will be the essential theme of larger company. These results of analysis indicate that a company must develop some novel ways of adaptation to the different strategic issues according to its size. Supposed that the company size can be understood as a surrogate of growth stage, the company growth will be realized by overcoming a novel issue created through the innovative activities of the organization. This is congruent with the intention of our four assumptions. Though our statistical analyses can not make clear any evolutional or revolutionary process of the growth, we can hypothesize that a successful company will develop the opportunity-oriented strategic behavior through the activation of the organizational emergence while an unsuccessful one will be compelled to the stick to problem-solving activities laden by contingencies. Now we should expand those four assumptions and fact findings into the company

(*) Means of the orientation of cost efficiency of HP-group was 3.92 and that of LP-group was 3.54. This result was contrary to the result of the whole sample appeared in Tab. 3.

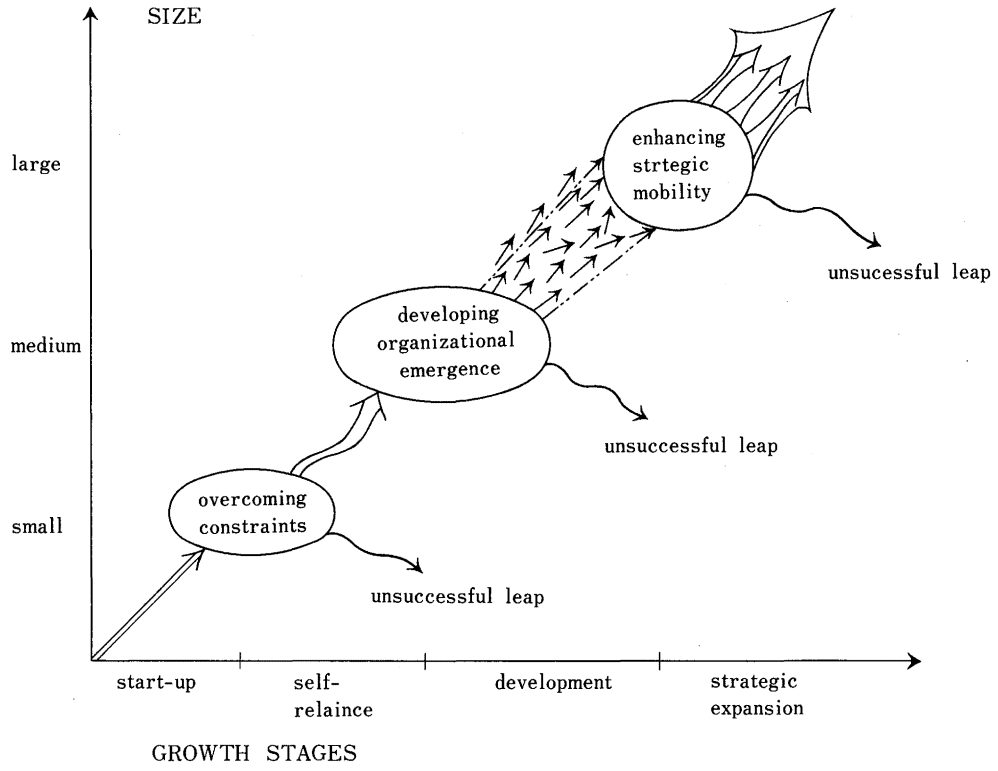

Fig. 1 comany growth model

growth model.

STRATEGIC GROWTH MODEL

Like the results of many antecedent studies, our research seems to support the fact that the priority of importance of strategic issues changes uniquely according to the growth stage of small company. These strategic issues seem to be integrated into a logical pattern of organizational contingencies which will be overcome by the strategic leap. That is, a company can be growing incrementally under stable conditions, but over time accumulated piecemeal issues will become cristalized as a critical issue which must be conquered by not an incremental way but a radical way. However we think that this critical issue is not a crisis but a novel opportunity to transform existing strategic behaviors. Thus the growth can be regarded as not only a goal of company but the process of opportunity creation for the strategic leap. Therefore the company growth will be depicted as the discontinuous process of incremental expansion and the strategic leap. Those hypotethic explanations are drawed into Fig. 1.

The vertical dimension is the size of company, and the horizontal dimension is the growth

stage. The company growth is figured as the function of size and time. Size is gauged by the number of employees, and is divided three levels : small (around 50 employees), medium (less than 300 employees), large (more than 300 employees). Needless to say, those landmarks are not absolute criteria of size classification. Criteria of the size must be flexibly changed according to the strategic competence of each company because each company will face unique contingencies. What is important is to understand that there are at least four levels of size until company cast off the skin of small company. Our analysis lacked the time dimension. We did not get the reliable data about the aging of each company. Some companies reported the year of starting their businesses while others told us the year when they organized their companies as a legal corporate form, such as a limited company or a joint stock corporation, or were reorganized by merger and/or reconstruction after bankruptcy.

Here we assume four evolutionary stages of the aging (not numerical year) based on the interviewing results with top management. They are (1) start-up, (2) self-reliance, (3) development, (4) strategic expansion. During a evolutionary stage small companies can proceed to expand its product/market by striving for improvement of the existing strategy. But exceptional cases or novel problems will accumulate within companies over time. At a certain point they will change these critical issues that they must innovate their strategy to deal with. We think these issues happen at the crossings of the size dimension and the time dimension. Critical issues will trigger innovative efforts. Thus companies actively tackle to create novel strategic responses, that is strategic leaps. We assume that there are at least three strategic leaps which small companies must achieve until they gain the strategic autonomy as big companies. They are (1) the overcoming of constraints, (2) the development of organizational emergence, and (3) the enhancement of strategic mobility. Focusing on these evolutionary stages and strategic leaps, we develop our growth model. One feature of our model is that the explanation of the growth process is limited up to the strategic expansion. The main reason is in our concern. Our concern is concentrated on building the growth model of small company. We think that the growth process of large company will be explained better by the strategy theory.

(1) START-UP

In the first place a company will be established by such entrepreneurial actors as will find out a promising business opportunity or a chance to run a business by some sponsors. An important point here is that there is an intentional encounter of encouraged persons contributing available resources to carry on business (Pennings, 1980 : 1982). Start-up companies can seize a chance for growth by rapid responses in the focused market by the active leadership behavior and skills of founders (Cooper & Bruno, 1977). Ironically the first success will cause the limiting factors to

growth. Succesful niche strategy sometimes promote the adherence to a few major customers within a segmented market (Porter, 1980). The futurity of company growth becomes to be combined with these limited customers' growth, and companies may unconsciously decrease their efforts of market expansion.

On the other hand the most start-up companies are compelled to build up the good interorganizational relationships by reason of the shortage of resource. Especially they tend to give careful consideration to financial sources, which function as not only the indispensable financial suppliers but the important information carriers and the exquisite management consultants. There is a relatively high probability that these unilateral dependencies will change into constraints of growth, because the supplide sources have a need to expand their business connections under the initial conditions that are favorable for these suppliers. Furthermore the political activities of business circles will be important in order to make a consensus in terms of the order of industrial competition or industrial collective strategy (Astley & Fombrum, 1983: Astley, 1984). But this collective strategy sometimes causes dysfunctions, such as decline of the strategic flexibility of interconnectedness, decline of organizational adaptability, increase of external disturbances, and attraction of new entry, while it will minimize the decision making uncertainty by reducing the movement among environmental elements (Bresser & Harl, 1986). Thus the interorganizational dependence is not only an important factor for survival of a small company but a cautious limiting factor.

(2) THE FIRST STRATEGIC LEAP: OVERCOMING CONSTRAINTS

According to the resource dependence theory (Emerson, 1962: Pfeffer, 1977: Pfeffer & Salancik, 1978: Bacharach & Lawler, 1980: Pfeffer, 1981), the criticality and scarcity of resource will determine the degree of dependence among actors. Basically the way to reduce such resource dependence is to cultivate their own resources or substitutive ones (Child & Kieser, 1981). However it is too difficult for start-up companies to procure the needed resources for themselves. One feasible way will be the creation of relative attractiveness in terms of their operations, especially production and marketing. Establishing distinctive advantages over competitors, that is the first-mover advantage (Brittain & Freeman, 1980), can lead high attention of customers or suppliers. Thus start-up companies actively tackle the improvement of their technological competence as soon as possible. Leadership behavior of founders will concentrate on the development of workers' skills. For workers' potentiality is only a competitive edge that can be strengthened at the discretion of top management at this stage. We can point another way to deal with the dependence. It is the increase of variety of transactions. This includes two meanings. One is the reduction of dependence, the other is to set their businesses into the promising

direction. But this way will be limited by the attractiveness of their products while founders' statesmanship will contribute to expand transactions.

It will be clear that to survive and to keep growth must be quite different. The survival is prerequisite to the growth, but the growth means to take more intentional efforts than the survival does. The shift from the start-up stage to the self-reliance stage will depend upon the degree of the created relative attractiveness, to say in other words, the degree of the uniqueness of services extracted from human resources. We think this is the strategic leap of start-up company. In Japan recent new technological progresses open various opportunities for small companies to develop their own technological competence. Rapid growing start-up companies boldly challenge such technologies. But we can see a large number of subcontractors that are controlled their production volume and cost by the growth rate of their parent companies because of their failure of this strategic leap.

(3) SELF-RELIANCE

Through reduction of dependence, companies gradually expand and/or deepen their domains by briskly using their own accumulated resources. Establishment of their own core technology is one of the important key factors for success in the industrial competition. However it is a rare case that companies at this stage can accomplish a very novel technological innovation regarding high technological areas. Technological uniqueness is usually pursued as the elaboration of their production system within some existing technological areas. For example, the investigated companies took the following measures to improve their own technological competence : investment of 10% of sales into renewal of production system, a permission rule without reservation to employees' application of participation in technological training programs outside their company, or an effort to join technological projects of a big company. But the way to establish their uniqueness is not flat. Many companies experience a low increase of returns as compared with the volume of effort and investment. During the self-reliance stage they are challenging to expand their scale under the conditions of muddle, shortage of financial resource and talented workers. Founders always are at the top of companies, and spend most time with operating workers.

(4) SECOND STRATEGIC LEAP : DEVELOPING ORGANIZATIONAL EMERGENCE

Before long the new problems increasingly take shape as companies grow steadily. Near around 100 employees, top management, who includes founders and executive class managers, begin to feel some difficulty of keeping the existing rate of growth, or find out the loss of lead compared with rival companies. The limitation of competence of the face-to-face management results in these problems.

When a company employs less than 100, to say nothing of employees' names, top management can know his employees' characteristics. He can arrange employees along their personalities and can motivate them by individual attention. However this arrangement depends upon the capacity of top management's memory. One top management of the company which I visited said, "Every morning I watch the panel of photo pictures of all employees, which I hang on the wall of my office, in order to remember their names, birth dates, and other personal characteristics. And I always speak to my employees by their names." But sooner or later he will face the limitation of memory.

The second strategic leap is related to the establishment of the organizational emrgence through the transformation of leadership behavior. Personal management contains two major problems at this stage. One is a problem of bounded rationality or a limitation of information processing capability (Simon, 1945 : Galbraith, 1973 : Tushman & Nadler, 1978). To improve not personal but organizational information processing competence through the organizational design is the most popular way to deal with this problem along the Chandlerian paradigm. The second problem, isolation of top management from operating site, is more serious (Quinn, 1985). Because the operating sites are not only the actual production centers of today's worth but the creating spots of tomorrow's ideas. The ideas of new products or informations about critical problems of their products usually lie in the sales department, and novel ideas of technological innovation are frequently generated by the operating workers troubled with the existing production systems. One president told me that whenever he visited the factories he found at least ten ideas for improvement of existing operation systems, and that operating sites seem to be a treasure box of future ideas. Thin communication with their operating workers and the lack of fresh informations from operating activities will cause the decrease of sensitivity of strategic response by top management and the loss of direct means to motivate the organizational innovativeness. The limitation of personal management will begin to disturb the organizational emrgence, and the rate of innovation will decline.

What is needed here is not to stick to the direct control by top management but to leave a sufficient room of employees' discretion in terms of operation of their works without losing the totality of company, and to motivate them to challenge creative tasks. Top management should enhance thc autonomy of organizational activities and establish the identity of company (Quinn, 1978 : 1980 ; Keats & Conant, 1987). The important thing for top management is to make a corporate policy clear, to promote employees' emergent activities through the keen leadership behavior, especially the value-oriented behavior that will drive the spontaneous responses from employees against the changing situations. Top management should try to infuse their values or philosophies into the organization (Schein, 1983), and act as a critical information center to

communicate both formal and informal informations that will improve employees' understanding about the state of company. The purpose of these leadership behaviors is the promotion of values and information sharing throughout the organization. And further more top management can be asked to set up an unique organizational process or system that will stimulate employees' positive challenges and develop the horizontal communication between the technological department and the marketing department for innovation (Shanklin & Ryans, Jr., 1984).

(5) DEVELOPMENT

As the organization begins to act spontaneously as if it has its own will reflecting corporate value orientation, the organizational culture is gradually shaped. Here the organizational culture is "the organization's expressive and affective dimensions in a system of shared and meaningful symbols (Allaire & Firsirotu, 1984, p. 213)." The organizational culture filled with the spirit of challenge can permit spontaneous behavior at the lower levels, and can function to ensure that such behavior will coincide with the corporate policies. The results of trials and errors at the lower levels will be easily accepted and shared with the corporate level. A frequent birth of innovation from operating sites will contribute to enhance the rate of growth by the expansion of product/market. On the contrary to the Chandlerian paradigm, the development of strategy inclines to depend upon the direction of innovation or the competence of the organizational process regarding the creation of innovation (Burgelman, 1983-a). Thus the strategy will become inductive and emergent rather than deductive and planned (Minztberg, 1978 : 1985 : 1987-a).

But the emegence at this stage is to some extent different from Burgelman's model of autonomous strategic behavior (Burgelman, 1983-b : 1984). Compared with his research site, the diversified major firm, small comapnies frequently do not have distinctive management control systems for the diversification. So to speak, emergent activities are pastured in the atmosphere of encouragement of the innovation. This cause the last strategic issue that small companies should tide over before they become large ones.

(6) THIRD STRATEGIC LEAP : ENHANCING STRATEGIC MOBILITY

The third strategic issue is the problem of deterioration of the corporate strategic development. The common problem of these companies is how to manage the accumulated variety of product-market areas without losing organizational innovativeness. Up to this stage companies become large enough to develop their own strategies by themselves. On the one hand the control systems will be elaborated in order to improve the efficiency of information processing and communication. Companies are generally inclined to develop some subtle control systems that will vanish the control loss. However these control systems are frequently connected to the trend

of bureaucratization of organization (Langton, 1984), and sometimes estrange the innovative behaviors with challenging the novelty for for the reason that these behaviors deviate from the provisions of control systems (Zaltman, Duncan & Holbeck, 1973).

Furthermore companies begin to feel that it become much difficult to renew their adaptability to various and changing environments by pumping out incremental innovations from emergent trials of the lower levels. Because the incremental innovation stays within the existing scope of corporate policy. And the incrementalism sometimes shows a kind of adverse effect that it will promote the crystalization of the existing way of thinking through the reiterative use of successful methods.

Thus the major issues that must are two. One is how to develop the novel strategic responsiveness against the deversified operating areas, and the other is to reorient the organizational innovativeness. The former issue belongs to the development of hard systems concerning relationship of strategy and structure, and the latter one is related to the reorientation of organizational creativity through designing soft systems. One idea of organzational design to satisfy two issues is the loose-coupling organization (Weick, 1976). The structure of this organization is that subunits, which are allowed to adapt their own environments autonomously, are loosely interconnected into the total system. Subunits never need to adopt the same structure or the same management system except a requisite of sharing common corporate values. Thus one subunit may pursuit to develop a new product by the adoption of organic systems, the other may tighten the rigidity of systems to maximize the costefficiency under the low degree of uncertainty of the market. The rationality of corporate resource allocation and the emergence of organizational behavior will be totally confirmed at the same time. We think of the organizational change into the loose coupling organization as a strategic leap. Because the change includes some novel aspects. Firstly it pay attention to the strategic competence of an organization as a whole that will not be realized by the sum of partial optimizations. This means that a loose coupling organization tries to realize the simultaneous maximization of strategic adaptability of an organization as a whole and subunits. Thus secondly it needs to change the existing way of thinking so that each subunit may cooperate for the corporate goal and may maximize its own goal. Efforts of innovation will be concentrated within a certain range of the corporate goal in order to harmonize with the corporate strategy. The emergence of subunit is still important, but it may be restricted when the overemphasis on it will distort the resource allocation at the corporate level. The new way of thinking is on the subtle balance between the control and the emergence. Lastly as a result of transformation, it follows the redifinition of domain, the restructuring of resource development and reorganizing.

A president said, "If all departments and plants are centered on only one place, the sag of

management control must be yielded. It is very difficult to obtain talented managers who can lead a large number of subordinates. But we can easily find out the men who can manage less than fifty subordinates. Therefore we separate a subunit by every fifty people as an independent workshop. We delegate a great deal of autonomy to them. We think our company should be managed voluntarily by these workshops as if the rural people administrate their village through cooperative works by themselves.....Of course we invested much money and time to build these separated workshops, and changed management control systems in order to achieve the unity of company." This company, which has more than 400 employees, disperses its factories into five spots around Matsuyama city. Each factory is organized as an autonomous unit, but they are deeply interrelated one another according to the company's strategic orientation. Technological innovations are emergent from each factory through small group activities. For example the main machines of one factory are the invention by the cooperation of operating workers (idea creator) and engineering department workers (technological feasibilitator).

After enhancing the strategic mobility, companies already become large enough to formulate their strategies and to implement them by themselves. From now the growth will be better explained by the strategic contingency theory (Hofer & Schendell, 1978 : Minztberg, 1987-b) or the autonomous strategic behavior (Burgelman, 1983-a). Major issues, such as the redifintion of domains, the restructuring of resource development, or the renewal of organizations are exceedingly important themes of the strategy.

CONCLUSION

Firstly we set up four assumptions of the company growth based on two approaches. Next, the validity of these assumptions were partially confirmed by our empirical study, and some facts of the strategic behavior of Japanese small companies were found. By adding some results from interviewing with top management we integrated these things into a hypothetical model of the growth of small company. Major features of our company growth model are three. The first one is that the growth rather than the profitability is established as a basically shared goal of company. Secondly the growth of company can be a sequence of strategic processes of an organization conducted by the activities of opportunity creation through the innovation. The third is that a company will incrementally expand its scale of activity during the evolutionary period and revolutionally transform its behavoral mode by the strategic leap.

Our implications from this model are simple. The development of management of the growth appropriate to each growth stage is one of the key factors for the success of small company. This is a little better than antecedent studies. Our contribution is on an emphasis of the promotion of

organizational emergence from the start-up stage. The organizational emergence results from the autonomous actions to the evolving situation (Burgelman, 1983-a : Mintzberg, 1987). Thus it will have an effect on (1) the high rate of innovation or the grass-roots type strategy by the creation of organizational diversity (Mintzberg & McHugh, 1985), (2) the human resource management by the development of people's creativity through experimentations, (3) the organizational adaptability by the organizational learning and unlearning promoted by the challenging activities (Hedberg, 1981). Japanese small companies seem to initiate, proliferate and institutionalize the emergence by a catalyst of a shared goal of growth. Therefore in most of successful small companies people gradually make their work attractive for themselve and vitalize their company so as to expand their job area.

The second implication is concerned with top leadership. It is almost a common sense that top management should change their roles from a founder or an entrepreneur to an administrative manager according to their company growth. But few studies point that top management should grasp or dig opportunities for growth which are emergent within an organization (Mintzberg, 1976 : Kanter, 1983 : Hurst, 1984). We think that the organizational emergence generate various seeds of future growth unless top management can not be an opportunity seeker filled with an ambitious vision. Only such top management can execute the strategic leap, because it needs strong and persuasive leadership to the organization as a whole. When the organizational knowledge or intelligence is integrated under the guidance of a certain new vision, it will begin to create a novel information which contribute to the organizational transformation.

But there are three important problems in our discussion. The first problem is whether small companies will follow our growth process or not. Especially in terms of overcoming constraints and developing the organizational emergence we can predict, the sequence of them will become upset or they happen simultaneously. For example, a start-up by the separation from a parent company can give the priority to innovations through the organizational emergence under the protection of the parent. Or recently some new ventures challenge the second strategic leap from the beginning of their businesses by using the public encouragement policy for a small business or raising money through venture capitals. We should avoid to regard the growth model as rigid one. The real growth stages will be diverse according to the situations which individual company faces (Miller & Friesen, 1984). What is important is not to confirm the validity of a sequence of our model but to confirm whether these strategic leap will promote the company growth.

The second problem is that our model consists of only a few stages. Most studies set up more stages than ours. But it seems that a number of stages depend upon the focus of attention of researcher. Of course a number of stages will not directly relate to the depth of the theoretical explanation but to the particulars of practical explanation. We agree that our study needs more

efforts to get more detailed informations about the growth process based on an empirical research.

Lastly we discuss the ambivalence of the growth, that is, the growth will be bound by the growth. We assume tacitly the possibility of infinite growth of a company. But after reaching the large sized company, many companies gradually lose its innovativeness or challenging spirit which was a unique characteristics once. If a sense of stability is caused from big size of company, even loose coupling system can not prevent it from deteriorating organizational emergence. This cognitive dilemma is a dysfunction brought by the company growth. We can not overlook the cognitive problem in terms of the company growth, because a germ of the problem is in the growing process of the small sized company. But it seems beyond our concern here. We had better discuss it at another opportunity.

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Appendix I

The questionnaire was sent to 1091 companies under the condition that president or other responsible for general

management should answer it. Most respondents were presidents or directors. Others were the persons ranked higher than middle managers. We checked carefully their positions so as to confirm the validity of respondents in the latter cases.

Our questionnaire was designed according to Kagono et al (1985) in order to secure comparability with it. But many questions were modified so that they might reflect the features of small company.

The questionnaire consists of two parts. One is measured by 7 or 5 point Likert scale. It includes 17 questions about enviromment, 5 questions about technology, 22 questions about strategy, 38 questions about top's leadership behavior and organizational behavior, 13 questions about control graph, and 16 questions about performance. The other part includes some numerical statements of company outline, ranking of goals, and open-ended answer of company philosophy. Here the questions in terms of Table 2 and 3 are arranged and listed.

Appendix II

Ranking of company goals

How important are the following goals for your company ? Please select three important goals and rank them in order of importance : 1-the most important to 3-the third most important.

- Return on investment
- Increase in market share
- New product ratio
- Promotion of interorganizational relationships
- Rationalization of operation
- Equity/debt ratio
- Improvement of product portfolio
- Improvement in quality of working conditions
- Improvement in public image of the company

Appendix III

Strategic behaviors

A. How would you characterize the business environment of your company ? Plase circle the number on the scale that best presents your judgment about each aspect of the environment.
   - The markets that you serve are generally…
     not competitive 1 2 3 4 5 6 7 very competitive and hostile
   - The average profitability of firms in the market that accounts for the largest percentage of your sale is…
     very low 1 2 3 4 5 6 7 very high
   - Convenience of procuring raw materials constrains your business…
     not severely 1 2 3 4 5 6 7 very severely
   - Closeness to your main customers or market constrains your business…
     not severely 1 2 3 4 5 6 7 very severely

B. To what extent does each statement listed below correctly describe your company's technology ? Please circle the appropriate number : 1 definitely true, 2 somewhat true, 3 can not say one way or the other, 4 somewhat incorrect, 5 definitely incorrect.
   - Your company introduces new production facilities in comparison with rivals. 1 2 3 4 5
   - Your facilities can adapt a change of production method flexibly. 1 2 3 4 5
   - Production systems are designed centering around your own core technology. 1 2 3 4 5
   - Employees are skilled in comparison with rivals. 1 2 3 4 5

C. To what extent does each statement listed below correctly describe your company's strategies ? Please circle 5-point scale appropriately : 1 definitely true, 2 somewhat true, 3 can not say one way or the other, 4 somewhat incorrect, 5 definitely incorrect.
   - Your company emphasizes accumulating diverse base of know-how and technological skill. 1 2 3 4 5
   - Your company is always a innovator which actively takes risks on the development of new product and/or market. 1 2 3 4 5

- Your company tries to take advantage of cost efficiency in the existing market. 1 2 3 4 5
- Your company has actively acquired new businesses. 1 2 3 4 5
- Your company seeks peaceful coexistence with rivals. 1 2 3 4 5
- Activities within business circles are indispensable to maintain the stable relation between supply and demand. 1 2 3 4 5

D. To what extent does each statement listed below correctly describe the characteristics of your company's organization and top leadership? Please circle 5-point scale appropriately: 1 definitely true, 2 somewhat true, 3 can not say one way or the other, 4 somewhat incorrect, 5 definitely incorrect.

(Consideration-oriented behavior)

- Top management takes employees' opinion into consideration. 1 2 3 4 5
- Top management actively concerns with the atmosphere of workshop and/or workers' private life. 1 2 3 4 5

(Task-oriented behavior)

- Top management always encourages the enforcement of tasks. 1 2 3 4 5
- Top management tries to assign jobs clearly. 1 2 3 4 5

(Value-oriented behavior)

- Top management always states his way of thinking or his values to employees. 1 2 3 4 5
- Top management has a sprit that he do by all means what he says. 1 2 3 4 5

(Information-oriented behavior)

- Top management respond quickly to inquiries from subordinates. 1 2 3 4 5
- Important information is usually exchanged informally among top management and managers. 1 2 3 4 5

(Stateman-oriented behavior)

- Top management actively search for problems within your company and take the leadership in solving them. 1 2 3 4 5
- Top management actively pursue the exchanges with outsiders. 1 2 3 4 5