Structure As A Predictor Of Strategic Planning Use

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Abstract

This article provides: (1) support for the configurational approach in the study of organizations by empirically deriving "ideal" organizational factors, and (2) insights into the interrelationship between organization structure and strategic planning use. Three structural factors are identified resembling Mintzberg's (1993, 1979) "machine," "diversified" and "adhocratic" ideal forms. Through a regression analysis these factors were found to be significantly and positively related to the use of strategic planning. The model formed explained approximately 48% of variance in the use of strategic planning in participating firms. Results also indicate that the emphasis on individual planning tools (mission/vision, long and short-term objectives, action plans and policies) varies with the intensity of particular factors.

Introduction

The link between organization structure and use of strategic planning continues to be an area of great interest in both the academic and business worlds. Recent work has stressed characteristics of strategic planning processes such as formality and articulation (Mintzberg, 1994), comprehensiveness, centralization, and integration (Fredrickson, 1986) and simplicity (Lumpkin and Dess, 1995). Empirical examinations of this link remain scarce. In this study the articulation of direction as indicated by use of multiple direction-setting tools as well as the level at which organization members are expected to be guided by the overall strategic plan are examined in relationship to characteristics of organization structure.

Review

Organization structure has been describ-

ed and investigated in two general ways. One method is to dissect the overall structure of an organization into a number of specific characteristics such as centralization/decentralization, form of departmentalization, span of control or degree of formalization and examine interrelationships with other organizational or environmental variables. Another method is to describe organization structures as sets of characteristics that "fit" together to form effective organizations. Mintzberg's (1993, 1979) "simple," "machine," "divisionalized," "professional" and "adhocracy" and Burns and Stalker's (1961) "mechanistic" and "organic" structures are examples of this latter method. According to Miller (1996) research directed at the configurational approach remains underdeveloped.

The Mintzberg (1979, 1993) and Burns and Stalker (1961) models suggest a third possible means of viewing organizations, as a set of structural factors with each factor representing structural variables which increase or decrease in

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intensity with other variables within the factor. Burns and Stalker (1961), in fact, preferred this perspective suggesting that their mechanistic and organic structures be viewed as two ends of a continuum. Mintzberg (1993, 1979) implied a similar view by noting that the strength of a structural form was interrelated with the power of a certain part of the organization. As power shifted from one part of the organization to another, the structural form could be seen shifting from one ideal form to another. Viewing organization structure as a limited set of factors can thus be viewed as a middle ground between the study of organization structure "one variable at a time" and the study of structures as discrete forms.

There have been numerous studies concerned with investigating the link between strategic planning and effectiveness in different contexts. Mintzberg (1994) provided a fairly extensive review of this literature. His findings, however, are based on a definition of strategic planning as "a formalized procedure to produce an articulated result, in the form of an integrated system of decisions (pg. 12, 1994). This definition implies that the degree to which firms use strategic planning is tied to the degree of formality of the process. This restriction seems unwarranted and biases results toward organizational and other situational criteria most conducive to formalized processes. Not surprisingly, Mintzberg believed that the machine bureaucracy, the most formalized of his five ideal forms, was best suited to strategic planning (1994).

In this study, strategic planning is measured in terms of the degree to which it articulates a result or direction for the organization and the degree to which organization members are expected to be guided by the resulting plan. While further discussion of the

relationship between strategic planning and organization structure will be postponed until after the identification of structural factors, it is believed that the link between structure and strategic planning will be more far-reaching than implied by Mintzberg (1994) due to the removal of formality of process as a necessary requirement.

Research Design and Preliminary Results

Data for this study were obtained from the CEOs of ninety-one firms that have been participating in a longitudinal investigation of the interrelationships between strategy, planning, organization structure and the environment. Information was collected using a pretested survey instrument mailed directly to CEOs of participating companies. Originally, potential participants were chosen randomly from firms listed in Standard and Poor's *Industrial Compustat*.

A comparison of participating organizations in this study with all firms in Industrial Compustat is provided in Table 1. From Table 1 it can be seen that participating firms were generally larger, in terms of both sales and assets, and slightly more profitable than the population of firms in Industrial Compustat.

Table 1 Statistical Comparison of Sample With Compustat Population		
Data Item	Compustat (7341 firms)	Sample (91 firms)
Total Sales:		
Minimum	-4,482,000	88,000
Maximum	126,131,000,000	120,387,700,000
Mean	871,919,000	3,128,090,000
Std. Dev.	4,369,633,000	14,074,850,000
Total Assets		
Minimum	0	21,000
Maximum	349,574,000,000	164,063,100,000
Mean	1,604,513,000	5,128,350,000
Std. Dev.	8,929,244,000	20,031,240,000
Return on Assets		
Minimum	-111.00	-0.58
Maximum	304.50	0.46
Mean	-0.09	0.02
Std. Dev.	4.11	0.15

Respondents identified structural characteristics of their organizations by answering questions directed at the following areas: (a) form of departmentation emphasized, (b) centralization/decentralization, (c) type of coordination mechanisms emphasized, (d) use of staff departments, (e) communication flows, (f) subunit autonomy, and, (g) leadership style.

Respondents described their organization's structure by indicating the degree to which an item "fit" the existing organization structure. A seven-point Likert scale was used in this assessment.

A factor analysis was performed on these variables. A varimax rotation was used with the belief that the most appropriate solution would include multiple factors (in support of Mintzberg's (1993, 1979) "ideal" forms as possible structural factors).

Five factors were determined to have eigenvalues greater than 1.0. The rotated factors are shown in Appendix A. The first three factors were considered strong structural factors. The final two factors were generally weaker due to the dominance of one or two variables. Factor 4 had two variables with weights greater than $|0.40|$, task-oriented leadership and use of market divisions. One variable dominated Factor 5, the use of functional departments. These factors were considered too one dimensional and too strongly affected by "noise" to be included in the second part of the study. Surrogate factors formed from the first three factors are identified in Table 2. These surrogate factors include only those variables with weights greater than $|.40|$.

Contingency variables were used to provide greater insight into the factors obtained. These variables included product diversity, perceived environmental uncertainty, objective environmental uncertainty, organization size and internationalization. Product diversity was determined from reported number of product lines produced and/or sold by the organization. Perceived environmental uncertainty was determined through an index of items addressing the stabil-

Table 2
Surrogate Structural Factors

<p><i>Factor 1: Mechanistic-Integrated</i> Variables - Standardization of Tasks Standardization of Outputs Standardization of Skills Direct Supervision Vertical Communication Product Divisions (-)</p>
<p><i>Factor 2: Mechanistic-Autonomous Units</i> Variables - Vertical Communication Formal Communication Product Divisions Autonomous Units HQ Staff Experts</p>
<p><i>Factor 3: Organic-Decentralized</i> Variables - Shared Values CEO's Reliance on Others People-Oriented Leadership Horizontal Communication Market Divisions</p>

ity-instability of various segments of the environment. These segments included the economic and political environment, social trends, technological change, competition in the industry and the overall business climate. Objective environmental uncertainty was measured as the standard deviation of sales for a company over the past three years. Number of employees, as reported by Industrial Compustat, was used as a measure of organization size. Lastly, internationalization was based on the number of international subsidiaries held by each organization.

Pearson correlation coefficients were used to determine the link between the structural factors and situational characteristics. For ease of computation each variable within a surrogate factor was assumed to have equal weight or importance. Results of this analysis are reported in Table 3.

Use of strategic planning and emphasis placed of separate direction-setting tools was determined by asking respondents to indicate the extent to which each of the following were used to guide decision-making and activities carried out by organizational members: (a) a strong

Table 3
Pearson Correlations and Descriptive Statistics (Structural Factors & Contingency Variables)

Variables	Mean	s.d.	Mech-Int	Mech-Auto	Org-Dec
Perceived Env Uncertainty	25.3	4.4	0.11	0.39***	0.24*
Objective Env Uncertainty	27.1	4.0	-0.30*	0.28*	0.21
# Employees	18.2	85.0	-0.06	0.28*	-0.06
International	15.8	21.4	-0.17	-0.04	0.22*
# Product Lines	48.8	190.7	-0.29**	0.24*	0.05

*p < 0.05; **p < 0.01; ***p < 0.01

sense of mission/vision, (b) long-term objectives (two years or more time horizon), (c) short-term objectives (one year or less time horizon), (d) action planning, and (e) explicit policies.

Responses were used individually to identify the importance of each individual planning tool to the planning effort and were also combined as a measure of the overall articulation of direction and as a measure of the degree to which organizational members were expected to make decisions and take action based on the strategic plan.

Pearson correlation tests were performed on the surrogate structural factors, the strategic planning index and individual planning tools.

Regression analyses were performed to determine the link between the structural factors identified and strategic planning. In the analysis the structural factors were treated as independent variables while the strategic planning index acted as the dependent variable. Also regression tests were performed using structural factors as independent variables and each direction-setting tool as a dependent variable.

Dominant Structural Factors

The three factors identified strongly resemble structural configurations discussed previously in the organization theory literature. The mechanistic-integrated factor is similar to Mintzberg's "machine bureaucracy" (1979, 1993) and

Burns and Stalker's (1961) "mechanistic" structure. The mechanistic-autonomous factor is similar to Mintzberg's "diversified form" (1979, 1993) as well as Chandler's (1962) description of the divisionalized structure adopted by Du Pont and General Motors in the early 1900s. The organic-decentralized factor is similar to Mintzberg's "adhocracy" (1979, 1993) as well as Burns and Stalker's (1961) "organic" organization.

The mechanistic-integrated factor included the following heavily weighted variables; standardization of tasks, outputs and skills, direct supervision and vertical communications interacting in the same direction with use of product divisions associated inversely with these variables. Mintzberg (1993, 1979) described the "machine bureaucracy" as a tightly integrated organization using standardization of tasks as the primary form of coordination. However, when tasks are standardized the ability to standardize outputs and skills is also enhanced. Vertical communication and direct supervision would be necessary to communicate and act on discrepancies from set standards.

Burns and Stalker (1961) also described their "mechanistic" structure as including the characteristics of standardization, or "the precise definition of rights and obligations and technical methods into the responsibilities of a functional position" (Shafritz and Ott, pg. 209). Also noted was the importance of direct supervision and a tendency to emphasize vertical communication

within this structural form.

Functional departmentation was emphasized for both the "mechanistic" and "machine" organization. However, Mintzberg (1979, 1993) also discussed a hybrid structural form with many machine characteristics but using market divisions. That both forms of departmentation are conducive to this structure may be the reason why neither was highly weighted in this factor. However, it is clear that use of product divisions is not consistent with other variables in this factor. The tight integration implied through standardization and direct supervision would no doubt be difficult under this form of departmentation.

The inverse relationships between the mechanistic-integrated factor and environmental uncertainty (as measured by sales volatility) as well as product diversity provide support for the link between this factor and "machine bureaucracy" as well as the "mechanistic" structure. Both configurations were thought to work best in stable environments. Standardization works best under conditions of "routineness" thus requiring environmental stability. "Machine bureaucracies" also tend not to be highly diverse. Diversity, according to Mintzberg, pushes this organization form to another form (1993, 1979).

The mechanistic-autonomous factor includes the following heavily weighted variables: vertical communication, formal communication, use of product divisions, unit autonomy and use of staff experts at corporate headquarters. Use of product divisions and unit autonomy are characteristics consistent with Mintzberg's diversified form (1993, 1979), a structure that has become popular in diversified companies and has been discussed at length in the OT literature.

Formal, vertical communication and use of corporate staff also seems consistent with this structure. An organization using this structural form may base corporate strategic decisions on hard information (financial criteria) making formal communication channels appropriate. This is consistent with Mintzberg's (1993) belief that

performance controls (based on quantitative standards) would be used extensively in the diversified form. Vertical communication would be emphasized due to the autonomy of the various divisions. Autonomous product divisions have little reason to communicate with one another. Staff experts at corporate headquarters may be used to gather data from the divisions and the external environment and to help buffer these organizations from the environment.

The mechanistic-autonomous factor was strongly and positively associated with perceived and objective environmental uncertainty, size and diversity. The link between this factor with size and diversity is consistent with Mintzberg's (1993, 1979) diversified form. The strong link between environmental uncertainty and this factor was unexpected. However, Galbraith (1974) has suggested that creating autonomous units is a tactic that can be used to deal with environmental uncertainty. Unit autonomy also may make it possible to rely on formal communication in unstable environments.

The organic-decentralized factor includes the following heavily weighted variables: existence of shared values, the CEO's reliance on others for making strategic decisions, a people-oriented leadership style, horizontal communication and use of market divisions. This factor is similar to Mintzberg's (1993, 1979) "adhocracy" or innovative organization and to Burns and Stalker's (1961) organic form.

Decentralization and horizontal communication are emphasized in both Mintzberg's (1993, 1979) description of "adhocracy" and Burns and Stalker's (1961) description of the "organic" form. Decentralization is required due to the dependence on lower levels for knowledge creation to solve ad hoc problems. Horizontal communication is also necessary because the complexity of the problems often requires the knowledge and skills of multiple people.

A people-oriented leadership style also seems to be consistent with this structural form. This leadership style will encourage decentrali-

zation and aid in the motivation of the professionals responsible for complex innovation.

Use of market divisions does not seem to have a natural fit with adhocracy. However the ad hoc nature of the work may be due to a focus on particular types of clients which would make this a viable form of departmentation within this structural factor.

This factor emphasizes mutual adjustment, as indicated by the importance of horizontal communication, and the standardization of norms and beliefs as coordinating mechanisms. Use of mutual adjustment is again consistent with Mintzberg's (1993, 1979) description of "adhocracy." A strong set of organization-wide values and beliefs may be used to counter the political struggles that are likely to emerge due to the lack of a formal authority structure.

The positive relationship between this factor and perceived environmental uncertainty is consistent with the view that this factor resembles Mintzberg's (1993, 1979) innovative form of "adhocracy" and Burns and Stalker's (1961) organic organization. Horizontal communication will aid the organization in adjusting to environmental turbulence. The positive relationship between this factor and internationalization was a surprise, however decentralization would make it possible for an organization to better deal with the complexity of a global marketplace. Bartlett and Ghoshal (1987, 1989) have argued that multinational corporations carrying out a global strategy require an overarching structure capable of facilitating global learning. Designing a corporate headquarters in terms of an "adhocracy" would seem to meet this requirement.

Propositions

Organizations most likely to emphasize strategic planning are those that can most benefit from its use. Two benefits of strategic planning include the potential for greater consistency of focus and enhanced coordination.

Strategic plans enable organizations to

identify those opportunities, results and activities most important during the time horizon of the plan. This consistent focus enables the organization to develop systems, behaviors and competencies to pursue the stated focus.

Strategic plans also provide a means for increased coordination of work effort by all members of the organization. By predetermining the general direction of the organization efforts of individuals and groups can be combined for greater effectiveness. Also, the various skills and competencies found in different parts of the organization can be exploited more effectively. In other words, through strategic planning there is a greater opportunity for creating and exploiting synergy by having individuals and subunits working together whenever possible for the development of competencies, the exploitation of opportunities and the accomplishment of mutual desired results.

The mechanistic-integrated factor depends on the use of standardization in coordination. The ability to follow a consistent focus will make the use of standardization more feasible. Use of strategic plans will also improve coordination through standardization and direct supervision by identifying desired results, competencies and actions which can then be turned into standards of behavior.

The mechanistic-autonomous factor includes the use of product divisions treated as autonomous units. This would seem to lower the need for the entire organization to be driven by a consistent focus. However, the use of formal communication may be more effective in organizations with a consistent focus in that a formal communication system can be developed to meet the challenges of that focus. Use of autonomous units will reduce the ability of the firm to reap the benefits of coordination across subunits.

The organic-decentralized factor, because of its use of mutual adjustment (through horizontal communication), will make it difficult for an organization to be able to enjoy the benefits of a long-term consistent focus. In as much

as it is related to an innovative organization, the focus of this structural form is likely to change frequently, as the organization looks for new problems requiring ad hoc solutions. However, coordination may be enhanced through strategic planning. Mutual adjustment may be enhanced by the ability to identify necessary competencies and activities that involve multiple individuals and subunits. Further, shared values can be highlighted within a strategic plan increasing their potential effectiveness as a coordination mechanism.

Based on the above discussion it is proposed that: (1) the mechanistic-integrated factor will be strongly and positively associated with use of strategic plans due to the ability to benefit from consistent focus and enhanced coordination; (2) the mechanistic-autonomous factor will be moderately and positively associated with the use of strategic plans due to the ability to benefit from consistent focus; (3) the organic-decentralized factor will be moderately and positively associated with the use of strategic plans due to the ability to benefit from enhanced coordination.

Results: Organization Structure and Strategic Planning

Table 4 provides the results of Pearson correlational analyses to determine the interrelationships between major structural factors, the strategic planning index and individual direction-setting tools.

A number of significant correlations were uncovered between the structural factors and the

Table 4
Pearson Correlations and Descriptive Statistics
(Structural Factors & Strategic Plan Variables)

Variables	Mean	s.d.	1	2	3	4	5	6	7	8
Mech-Int	16.4	6.8								
Mech-Auto	18.5	5.4	-0.17							
Org-Dec	25.3	4.4	0.04	0.11						
SP Index	24.2	3.8	0.45***	0.32**	0.43***					
Mission/Vision	5.8	1.2	0.27*	0.11	0.45***	0.63***				
L-T Objs	5.2	1.4	0.40***	0.07	0.18	0.61***	0.61***			
S-T Objs	5.2	1.4	0.01	0.23*	0.30**	0.40***	0.06	-0.18		
Action Plans	4.1	1.4	0.21	0.17	0.24*	0.59***	0.07	0.04	0.27*	
Policies	3.9	1.4	0.36***	0.32*8	0.06	0.59***	0.09	0.27*	-0.02	0.25*

*p < 0.05; **p < 0.01, ***p < 0.01

strategic planning index as well as with the individual planning tools. Since these relationships are generally the same as found in the regression analyses no further discussion will be provided at this point.

Not surprisingly, a number of significant associations existed between direction-setting tools assessed in this study. The strongest relationship existed between use of mission/vision and long-term objectives. Generally firms emphasizing one of these tended to emphasize the other as well. In addition, use of action plans was significantly and positively associated with use of short-term objectives and policies (at the $p < 0.05$ level).

Results of the regression analyses to determine the predictive ability of the structural factors on strategic planning and use of individual planning tools are provided in Table 5.

The model formed by the structural factors was highly significant in predicting level of strategic planning as measured in this study. Each of the factors: mechanistic-integrated, mechanistic-autonomous and organic-decentral-

ized, were strong, positive predictors within the model. The model explained approximately 48% of the variance in the use of strategic planning for participating firms.

The models formed by the structural factors to predict use of the various direction-setting tools were all significant. However, the predictive ability of each factor varied according to the direction-setting tool being examined. The mechanistic-integrated factor was a strong predictor in the use of mission/vision, long-term objectives, action plans and policies. The mechanistic-autonomous factor was a strong predictor in the use of short-term objectives, action plans and policies. Finally, the organic-decentralized factor was a strong predictor in the use of mission/vision, short-term objectives and action plans. Only in the case of action planning were all three factors significant. At the same time, in no case was the relationship between a structural factor and strategic planning use or individual planning tools found to be negative. In other words, upward movement along any structural factor was positively related to strategic planning use or use of an individual planning tool, although the relationship was not always

Table 5
Results of Regression Analysis

Dependent Variables	Strategic Planning Index	Mission/Vision	L-T Objs.	S-T Objs.	Activities	Policies
Intercept	6.66***	1.46*	1.92*	1.93*	0.85	0.50
Mechanistic/Integrated	0.28****	0.05****	0.09****	0.01	0.05**	0.09****
Mechanistic-Autonomy	0.26****	0.02	0.03	0.05*	0.05*	0.10****
Organic-Decentralized	0.32****	0.12****	0.05	0.09**	0.07**	0.00
F Statistic	26.70****	10.50****	6.87****	4.01**	4.01**	10.47****
R sq.	0.50	0.28	0.20	0.13	0.13	0.28
Adj. R sq.	0.48	0.26	0.18	0.10	0.10	0.25

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$; **** $p < 0.001$

significant.

Discussion: Structural Factors and Strategic Planning Use

The predictive ability of the surrogate factors in determining use of strategic planning was very strong. Nearly half of the variance across firms in the use of strategic planning was explained by movement on these structural factors. Further, the direction of association between structural factors and strategic planning was positive for each factor as well as highly significant. Thus, the results provide some support for all three propositions presented earlier. Clearly the use of strategic planning is not narrowly confined to one structural type.

It should be noted that the results of this study indicate that strategic planning use increases with the intensity of each structural factor examined. To the extent that the structural factors identified resemble Mintzberg's (1993, 1979) "machine," "diversified" and "adhocratic" ideal forms, it can be concluded that use of strategic planning increases the more organizations structure themselves around one (or more) of these ideal forms.

What is also clear is that the content of strategic plans or what is emphasized in direction-setting changes according to an organization's structure. While each factor was highly significant in predicting use of strategic planning, each tended to emphasize different planning tools.

The mechanistic-integrated factor emphasized long-term direction-setting tools including mission/vision, long-term objectives and policies. Action plans were also emphasized perhaps to aid in developing predetermined standards for coordinating future actions. This long-term focus fits well with the need for routine and is possible due to the stability of the environment found to be associated with this factor.

The mechanistic-autonomous factor emphasized policies, short-term objectives and ac-

tion planning. Missing are the emphases on mission/vision and long-term objectives which provide the greatest opportunity for maintaining a long-term focus. This brings into question Proposition #2 which suggested that this factor would be positively associated with strategic planning due to the ability to benefit from consistent focus. Instead, the emphasis tends to be on formal procedures through the use of policies, short-term results through the emphasis on short-term objectives and coordination through action planning. Whether the action-planning is directed at autonomous units or at interaction across units is unknown. What is apparent is that strategic planning under this factor is directed more at a short-term time horizon. The flexibility of this factor through the use of product divisions may lessen the need to plan for the long-term future while the high level of environmental uncertainty may decrease the ability to be effective with a longer term planning horizon.

The organic-decentralized factor emphasized mission/vision as well as shorter term direction-setting tools including short-term objectives and action-planning. The emphasis on the short-term is consistent with the association of this factor with environmental uncertainty and the need for integration of work across members and subunits. Mission/vision may be used to aid in developing a long-term focus without great specificity which would be difficult given the uncertainty and complexity associated with this factor. Mission/vision may also be used to improve coordination by outlining the culture or shared values and beliefs to be held by organization members.

Figure A depicts the associations uncovered in this study between structural factors, contingency variables and strategic planning use.

Conclusion

Since the publication of Mintzberg's *The Rise and Fall of Strategic Management* (1994) there has been an increased interest in identifying the conditions where strategic planning can be most effective. This study has provided some in-

Figure A
Configurational Model of Structure, Context and Strategic Planning Use

sight into the use of strategic planning in relationship to structural characteristics of the organization. Of most importance is that this study has indicated that strategic planning use is not confined to one structural type, however the direction-setting tools emphasized vary according to structural characteristics of the firm.

The structural factors identified do not suggest any new structural forms but provide some validity for structural types that have been discussed previously in the OT literature. However, that these configurations were identified through factor analysis suggests a slightly different perspective on these "ideal" forms of structure, not as discrete structural types, but as dimensions of structure. This middle ground perspective reduces the impact of a common complaint directed at the configurational approach, that is, that organizations do not jump from one ideal type to another, but move through evolutionary stages. Viewing these ideal forms as factors provides a model for tracking organizations as they move through these stages.

There are several limitations to this study. The small sample size and differences

between participating firms and the overall population of firms listed in *Industrial Compustat* make any generalizability of the results suspect. As noted previously, participating firms have been part of a longitudinal study of the relationships between strategy, structure and environment suggesting, perhaps, a stronger than normal interest in strategic management issues. Finally, this study has made no attempt to measure the effectiveness of the use of strategic planning in relationship to organization structure. It is possible that while strategic planning is apparently used alongside different structural types, its effective use may be more constrained.

Suggestions for Future Research

In a recent article Miller (1996) suggests the need to expand the use of the configurational approach in the study of organizations. This study can be seen as a short, humble step toward this expansion. Further research is needed to help validate this as well as other research on organization structure configurations and to provide additional insights to the link between structure, planning systems, strategy and envi-

Appendix A

Structural Factors Organization Structure Factor Pattern					
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Shared Values	0.3495	0.0688	0.6347	-0.0950	-0.1788
Std. Tasks	0.8351	-0.0574	-0.0597	-0.0791	0.0893
Std. Output	0.7771	-0.1879	-0.0183	-0.2624	0.1235
Std. Skills	0.8034	-0.1790	-0.0687	-0.2221	0.1851
Direct Supervision	0.5129	0.0639	-0.2090	0.1986	0.3507
Reliance on others	0.1488	-0.0844	0.7190	0.0765	0.1867
Task-oriented	0.0419	0.3194	-0.0881	0.6831	0.3610
People-oriented	0.1322	-0.1505	0.6906	0.3095	0.1187
Horizontal Comm.	-0.0035	-0.3253	0.4257	0.3283	-0.2050
Vertical Comm.	0.4393	0.5940	-0.0019	0.1760	-0.1419
Formal Comm.	0.3985	0.6202	-0.1190	0.1752	0.0810
Product Divisions	-0.4527	0.5733	0.2949	-0.1437	0.3181
Market Divisions	0.0565	0.3985	0.4545	-0.4567	0.0034
Functional Depart.	0.3856	0.1232	-0.0117	0.3376	-0.6688
Autonomous Units	-0.2308	0.6397	0.0627	-0.0910	-0.0083
HQ Staff Experts	0.2307	0.5543	-0.0581	-0.1628	-0.2868

ronment.

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