# PREREQUISITE OF SUPERIOR PERFORMANCE : MANAGING COALIGNMENT IN A DYNAMIC CONDITION

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<목차>



## Ⅰ. INTRODUCTION

Organization theory has a long and glorious history that has been built on the seminal thinking of people like Henri Fayol (1841-1925) and Max Weber (1852-1937), whereas the field of strategic management remains a relative newcomer that has developed from the works of scholars in the second half of the 20th century (Ansoff, 1965; Chandler, 1962; Rumelt, 1974). The two fields are highly complementary - witness the fact that the relationship between strategy and structure has been the subject of numerous conceptual and empirical studies that have explored their direct and indirect links. Direct links are where strategy and structure can be explained by the nature and diversity of the products and markets of the organization (Chandler,

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1962; Channon, 1973; Rumelt, 1974). Indirect links arise from the nature of and variations in the environment (e.g., Emery & Trist, 1965; Lawrence & Lorsch, 1967), organization size (e.g., Child & Mansfield, 1972; Pugh, Hickson, Hinings & Turner, 1969), or the characteristics of the technology employed (e.g., Harvey, 1968; Newman, 1971; Perrow, 1967). Woodward (1958, 1965) examined the effects of "technological complexity" and concluded that production requirements are key determinants of organization structure. Although her findings received strong support in subsequent studies (e.g., Montanari & Morgan, 1983; Reinmann & Inzerilli, 1979), others have argued that such relationships do not exist (e.g., Ballew, 1982; Blau, Falbe, McKinley & Tracy 1976; Donaldson, 1976).

In sum, existing research has identified the importance of strategy-structure relationships and the technology-structure relationships. However, little light has been shed on the importance of fit among all three, and thereby its relevance for firm performance has been ignored. The reason may be that strategy and structure have typically been viewed as a corporate-level phenomenon while technology and structure research has been more concerned with operational issues. Or, it may be that the paucity of research on strategy implementation means that the relationships between strategy and technology have received little attention.

In this work we deduce that superior performance requires a strategy-structure fit, a strategy-technology fit, and a technology-structure fit, and we consequently conclude that for managers, the key to unlocking that performance benefit resides within the management of the holistic strategy-structure-technology fit. Although organizational size has been identified as important determinant of structural characteristics (e.g., Hickson, Pugh & Pheysey, 1969), we have elected to hold it constant because my focus is on the business level. This means that we are primarily concerned with fit and performance issues in "single businesses" (Rumelt, 1974), individual strategic business units, or single divisions in multi-divisional firms. Also, by focusing exclusively on the business level, we avoid the different-levels-of-analysis trap that is problematic in the synthesis of

organization theory and strategy research.

## Ⅱ. STRATEGY, STRUCTURE, AND TECHNOLOGY - THE CONSTRUCTS

### 1. Strategy

From Porter (1980, 1985), a company's strategy at the business level should be designed to create a competitive advantage. Business-level strategy has two main variants - cost leadership and differentiation - and thus deals with management's action plan for competing successfully and providing superior value to customers. A cost-leadership strategy is designed to produce goods or services more cheaply than competitors by stressing efficient scale of operation. It also means the pursuit of cost reductions in manufacturing by investing in process R&D and reducing as far as possible the expenses of product R&D, services, selling and advertising. On the other hand, differentiation aims to create a product or service that has features such as quality, image, or prestige for which customers are willing to pay a premium price. The firm using differentiation thus seeks to be unique in its industry along some dimension that is valued by customers, which means investing in product R&D and marketing.

### 2. Structure

There has been a strong consensus that centralization, formalization, and complexity are the major theoretical dimensions of organizational structure (e.g., Child, 1977; Ford & Slocum, 1977; Gerwin, 1979; Hage & Aiken, 1967; Hall, 1977). Fry (1982) defined these three dimensions as follows. Centralization refers to decision-making authority and the extent to which that authority is retained at or near the top of a hierarchy or is spread throughout the organization in a participative arrangement. Formalization of

rules and standard operating procedures is the extent to which well-specified rules and procedures are intended to guide behavior. And, complexity, including vertical and horizontal differentiation has to do with specialization of labor, or the extent to which an organization's tasks are divided into narrow domains and assigned to specific individuals and departments. Some studies have used all three of these dimensions (e.g. Hickson, et al., 1969) while others have chosen to measure only one dimension, such as formalization (e.g., Lawrence & Lorsch, 1967).

Another perspective came out of this "context era" of structure research, and it simplified the researchers' task by expanding the notion of structure to one of "management system." This classic work by Burns and Stalker (1961) describes a "mechanistic" organizational form as one characterized by specialization, hierarchic control, precise definition of responsibility and reliance of formal instructions and procedures. Thus, the description of a mechanistic management system captures the essence of the three traditional dimensions at one end of a continuum, while the alternative, an organic form, does the same at the other end. The organic form distributes authority and responsibility throughout the organization, relies on a network structure of control and lateral communication and a broad variety of shared knowledge among organization members. This relatively simple typology makes the job of the empirical researcher more manageable by focusing on two discrete categories of structure rather than having to measure three dimensions, each along some continuum. Thus, for purposes of this study, we have chosen to use this definition of structure which fits well with the classic strategy-structure research (e.g., Chandler1962).

## 3. Technology

"Technology" in today's world has become shorthand for "high-technology" and reflects the massive impact that computers have had on individuals, organizations, and society. "Technology" as originally (and still)

used in organization theory is the workplace activities that are necessary to produce goods and services for customers, and it is this broader understanding that we use here. Definitions are numerous, but most have focused on the organizational processes for transforming inputs into outputs and the conversion or transformation process itself.

In an attempt to examine the relationship of a number of organization variables with technological complexity, Woodward (1958) defined technology in terms of the type of production process. Following that lead, the 'Aston group' (Child & Mansfield, 1972; Hickson, et al., 1969; Hinings & Lee, 1971) defined technology as workflow integration. Thus, the definition of the Aston group includes the extent of automation and task interdependence that combine to produce an integrated workflow. The other classic definition of technology comes from Thompson (1967), and it also relates technology to interdependence and workflow: long-linked/serial, mediating/pooled and intensive/reciprocal. More recently, Hulin and Roznowski (1985) defined technology as the physical combined with the intellectual or knowledge processes. Wenk (1989) defined it as the functions of human invention, innovation, and the applications of scientific knowledge, whereas Orlikowski (1992) restricted the scope of technology to material artifacts and various configurations of hardware and software.

It has been suggested that the use of these different definitions of technology are the cause of the variation in the findings of research on the technology-structure relationship (Ford & Slocum, 1977; Fry, 1982; Fry & Slocum, 1984; Gerwin, 1979; Reimann & Inzerilli, 1981; Withey, Daft & Cooper, 1983; Weick, 1990). But, in their meta-analysis, Miller, Glick, Wang, and Huber (1991) found that such is not the case insofar as the use of different definitions has little effect. They categorized the various definitions into three comprehensive definitions: a workflow definition, a production-continuity definition, and a routinization definition. Technology defined as workflow integration refers to the degree of automation, continuity, and rigidity inherent in the basic workflow of any organization (Hickson et al., 1969). Technology defined as production continuity refers to

the consistency of units of throughput as reflected in an organization's level of mechanization or mass-production orientation(Blau et al., 1976; Khandwalla, 1974). Finally, technology defined as routinization refers to the level of variety inherent in an organization's work (Perrow, 1967; Hage & Aiken, 1969). Given their finding that the use of different definitions of technology has a negligible effect on technology-structure relationships, Miller et al. (1991) suggested that "technology routineness" is a common underlying construct that is closely related to all three of these definitions of technology.

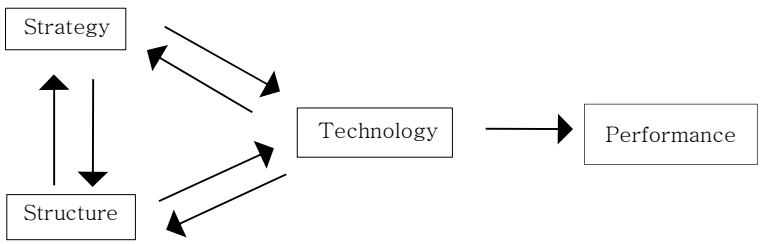
The earliest use of the degree of routineness as a crucial dimension of technology is by Perrow (1967) who saw technology as being based on two factors that affect organizational structure. The first is the number of exceptional cases encountered in the work process; that is, the degree to which stimuli are perceived as either familiar or unfamiliar. The second is the nature of the search process that is undertaken by the individual when exceptions occur. Perrow distinguished two types of search process. The first type involves a search that can be conducted on a logical, analytical basis. The second type of search process occurs when the problem is so vague and poorly conceptualized as to make it virtually impossible to analyze. In this case, no formal search is undertaken but, instead, one draws upon the residue of unanalyzed experience or intuition, or relies upon chance and guesswork. Therefore, according to Perrow, few exceptions and an analyzable search procedure describe a routine technology, but if there are a large number of exceptions and the search is not logical and analytic, the technology is non-routine. He also identified two other viable types that resulted from other search combination, but they rarely occur and safely can be set aside.

Hage and Aiken (1969) used the same explanation of technology, routine vs. non-routine, in their research on the relationship between the degree of routineness of work and the social structure and goals of health and welfare organizations. According to them, a people-processing organization is considered to have a routine technology if the clients are stable and uniform

and much is known about the particular process of treatment. In the contrasting situation of little uniformity and little understanding, the technology of an organization was considered to be non-routine. They argued that the degree of routineness most appropriately provides the basis for general propositions that can be tested in many organizational contexts because it is one dimension of technology that can be applied equally to almost all kinds of organizations. Consequently, in this work, we also consider technology in terms of routinization.

## Ⅲ. FIT

The model of fit among strategy, structure, and technology and the relationship with performance is shown in Figure 1. In the following discussion of fit among these three constructs, we examine two dimensions at a time, while holding the one other constant, before moving on to discuss fit among all three. For the purposes of the initial analysis, fit is defined as matching; fit among all three factors is defined as covariation (Venkatraman, 1989).




<Figure 1> Strategy-Structure-Technology Fit and Performance

## 1. Strategy-Structure Fit

Mintzberg (1990, 1991) and Ansoff (1991) debated the supremacy of a "design" approach to strategy formulation versus an emergent or "learning" approach and, perhaps not surprisingly, there was no satisfactory conclusion or correct answer to this very public disagreement which really reflected earlier debates of whether structure followed strategy or strategy followed structure (Hall & Saias, 1980). These earlier debates on the primacy of strategy or structure were finally put to rest when Donaldson (1987) showed that the key to performance is a corporate-level strategy-structure fit. He rejected notions of determinism and strategic choice, and, consequently, the debate on primacy between them, in favor of a model whereby there is constant adjustment between strategy and structure to regain fit. If strategy is changed, then the structure needs adjusting; if the structure is changed, then strategy needs modifying to fit. The performance implications of such adjustments to regain fit were clearly demonstrated by Amburgey and Dacin's (1994) study of 262 firms over a 28 year period. For the purpose of building a theoretical model we assume a steady state and focus the fit between business-level strategy and structural form but, once that fit is established, our arguments do not preclude change and the adjustment of either to regain fit.

In their study of twenty English and Scottish industrial firms, Burns and Stalker (1966) found that mechanistic structures are characterized by centralized authority, well-specified rules and procedures, and a precise division of labor. Such organizations are effective when they perform routine tasks and rely heavily on programmed behaviors. They are, however, relatively slow in responding to the unfamiliar. Mechanistic structures are therefore more appropriate for implementing a low-cost strategy, which is typically driven by increased economies of scale. To achieve those low, per-unit costs from scale effects means standardization of work procedures and increased specialization, both of which are compatible with a mechanistic

structure. In contrast, the organic structure is characterized by decentralized authority, few rules and procedures, and a less precise division of labor, which means that it is a more flexible and adaptive structure. To successfully implement a strategy of differentiation, firms must rely on creative product adaptations, applied research and development, and innovative new-product development. Clearly, the demands of differentiation can be met more efficiently by an organic structure than a mechanistic one. Therefore:

***P1*** : *For a given technology, firm performance will be higher when there is a match between strategy and structure - business-level strategy is low cost (differentiation) and structure is mechanistic (organic) - than when there is a mismatch.*

## 2. Strategy-Technology Fit

In strategy, there is a tendency to treat formulation and implementation as consecutive activities, but their separation was originally done for convenience so that the subject would be easier to teach - see Mintzberg's (1990: 179-180) discussion on Andrew's comments and rationale for the separation. Instead of being consecutive, the relationship between formulation and implementation is reciprocal. The relationship between strategy selection and the type of technology is thus reciprocal. Of course, the selection of a technology follows strategy formulation in the case of an entrepreneurial startup but, beyond that, the order of which comes first becomes unimportant as attention shifts to managing the fit between them. Once more we assume a steady state for the purpose of discussion; once a fit is achieved, however that assumption can be relaxed.

When technology is routine, the ability to differentiate the products and services are likely limited because few experiences for handling exceptional cases not only negates the need for any organizational learning but also can

lead to political, cognitive, and structural rigidity, which increases resistance to change. As a result, these inertial tendencies restrict the ability of a company to rapidly respond to changing customer needs or to proactively create new product or service features to fulfill customers' unrealized needs. Rather, and as already pointed out, routineness encourages activities such as investments in increased economies of scale. Those investments help firms maintain a position of cost leadership, or become a cost leader, but, in turn, they tend to increase specialization which, again in turn, works best with more routineness - there is a circle of increased specialization, routineness, and efficiency. Conversely, when technology is non-routine, the ability of firms to generate a cost-leadership position is limited. But, because it is likely that organizations with non-routine technology have a broader array of technology experiences that foster adaptability, they have the necessary characteristics for effective product differentiation. Therefore:

***P2*** : *For a given structural form, firm performance will be higher when there is a match between strategy and technology - business-level strategy is low cost (differentiation) and technology is routine (non-routine) - than when there is a mismatch.*

## 3. Technology-Structure Fit

From the organization-theory literature, the relationship between technology and structure appears to be unidirectional - structure must be designed to fit the technology as well as to accommodate the external environment (Rousseau & Cooke, 1984; Perrow, 1967). However, herein lies a logical problem because if structure is adjusted to fit strategy, then the lack of a reciprocal relationship will change the technology-structure fit that resulted from the "imperative" rationale to that of no-fit. Furthermore, in practice it clearly makes sense that an organically structured organization more likely incorporates non-routine, novel (i.e. more complex) technology in

its technical core than a mechanically structured organization. We believe that the lack of meaningful discussion in the literature on how structure can affect technology is nothing more than an omission or oversight and, therefore, as per the above discussions on strategy-structure fit and strategy-technology fit, we assume that the relationship is reciprocal. Also, again, we assume that a steady state exists and that it can be relaxed once fit is achieved.

As mentioned earlier, Miller et al., (1991) identified three possible technology-structure models: technology routineness is positively associated with centralization, routineness is positively associated with formalization, and routineness is positively associated with specialization. The first model is based on the argument that increased routineness makes increased centralization more feasible because routineness simplifies coordination needs and reduces the number of novel decisions that must be made. Similarly, the second model is based on the argument that routineness reduces the number of novel decisions and consequently promotes the specification of rules and standard operating procedures. The third model is based on the argument that increased routineness allows greater specialization because large-scale repetitive processes can be decomposed into subcomponents performed by specialized people and equipment. In all these cases, it is clear that the mechanistic structure will be the best one to employ a routine technology because of the reliance on standardization, specialization and centralization of decision-making. On the other hand, technologies that are non-routine require that organization members be able to think creatively, react flexibly, and respond to change quickly. Obviously, routing decisions up the hierarchy or being restricted by written procedures is not compatible with such a technology. Thus, the organic structure would seem to be the most appropriate in this situation. Note that Thompson's (1967) propositions about technology/interdependence with regard to coordination, departmentalization, and hierarchy are also consistent with this perspective. Therefore:

***P3*** : *For a given strategy, firm performance will be higher when there is*

*a match between technology and structure - technology is routine (non-routine) and structure is mechanistice (organic) - than when there is a mismatch.*

## 4. Fit as Covariation

Moving on from bivariate fits between strategy, structure, and technology, we consider a fit among all three as covariation. Fit as covariation is the "internal consistency among a set of underlying theoretically related variables" (Venkatraman 1989: 435). Instead of covariation, it could be argued that the strategy-structure-technology relationship is fit as a gestalt because, as Venkatraman (1989: 436) pointed out, covariation and gestalt differ from each other only in "the degree of variation in the functional form." However, as he also points out, covariation "requires a much greater precision in the pattern of logical consistency among the factors and the explication of the underlying logical link among the attributes." The pattern among strategy, structure, and technology is both precise and clear, as is the logical links among their attributes - low-cost and differentiation for strategy, mechanistic and organic for structure, and routine and non-routine for technology.

With covariation, fit is achieved through coalignment of factors, which means that any variation or change in any one of the attributes for strategy, structure, or technology requires adjustment to the attributes of the other two if firm performance is going to be maximized. Given that each factor has two attributes, there are eight combinations of coalignment which break into two groups: full coalignment (2 instances) and partial alignment (6 instances). I can therefore deduce that:

***P4*** *: Firm performance will be higher when there is a full coalignment among strategy, structure, and technology than when there is a partial coalignment.*

# Ⅳ. DISCUSSION

We have argued that a low-cost strategy is more likely to improve performance when coupled with routine technology and the centralization, formalization, and specialization that are characteristics of mechanistic structures. In contrast, differentiation is more likely to improve performance when coupled with non-routine technology and a more flexible, organic structure with the characteristics of low centralization, low formalization, and low specialization. These arguments, which we have developed from the well-established theory in strategic management and organization theory, have been combined into a model that speaks directly to the issue of sustaining competitive advantage. This model is not intended to be a replacement for the resource-based view where competitive advantage arises from the possession and deployment of valuable and rare resources, and sustainability comes from the inimitability of those resources (Kell & Carrot, 2005; Barney, 1991). Instead, it is intended to be complementary to that thinking insofar as it focuses attention on the importance of fit among strategy, structure, and technology at the business level and thus fit as covariation, which reduces the tendency to think of resources and competitive advantage as being static (Zahra & George, 2003; Prime & Butler, 2001). By recognizing the importance of the managerial task of maintaining coalignment among strategy, structure, and technology we are, in effect, recognizing that managers live in a dynamic world and to maintain performance they have to respond to changes. For example, as the environment changes (e.g., a competitor brings out a new advertising campaign) managers adjust their strategy, which also means adjusting structure and technology to maintain fit. Or, for example, if the change is internal to the organization in, say, technology (e.g., purchasing new equipment that extends flexible-manufacturing capabilities), then adjustments have to be made to strategy and structure to maintain fit.

The model presented in this study is testable, empirically. All of the

variables we have specified here have been measured directly, or by proxy, in earlier studies, both in the organization-theory and strategy literatures. The relative simplicity of the model not only allows for straightforward measurement and analytical techniques to be used, but it also allows the researcher to investigate the more complex covariation effects on performance.

However, there is a caveat to the model presented in this study. Organizations with large percentages of professionals might use a more organic structure (i.e., low in centralization, formalization, and specialization) for several reasons beyond technology and strategy. First, professionals are socialized to maintain high work standards without centralized controls (Saxberg & Slocum, 1968). Second, professionals are highly trained to handle broad, rich jobs. Finally, it has been suggested that many professionals resist highly formalized, centralized or, specialized work settings because such settings frequently result in conflict between professional and organizational norms (Hall, 1968). However, Miller et al. (1991) found that professionalization does not appear to affect routineness-centralization or routineness-specialization correlations. They found that professionalization only affects routineness-formalization correlations insofar as more positive routineness-formalization correlations are found in less professionalized organizations because professionalization and formalization are alternative forms for coordination and control, so that when one is in place the effect of the other vanishes. Thus, if the percentage of professionals increases, the company more likely has a less-formalized organizational structure, regardless of its technological characteristics, and the effectiveness of low-cost-strategy-and-routine-technology fit will be diminished. On the other hand, if the percentage of professionals increases, the effectiveness of differentiation/non-routine technology fit will be intensified because of less formalized organizational structure. Consequently, empirical testing of this model may have to measure and control for the number of professionals in the workplace to adequately assess the other relationships.

In conclusion, we believe that this work addresses an issue heretofore not

discussed in a comprehensive manner: the disconnect between what should be complementary disciplines - organization theory and strategy - at the business level. We also investigate a specific research topic that has heretofore not been addressed - the hypothesized relationship between strategy, structure and technology - perhaps because of the disconnect issue. While there are the studies that have explored some of the pair-wise relationships in this trilogy, the present study is the first attempt to take a more holistic approach. Beyond the research interests as academics, there are some implications in this model for the practitioner. By limiting the scope to the business-level, we relate the model directly to firm performance. Using "tried and true," valid constructs that have been in the academic literature for many years, the resulting model should help practitioners understand the complexity of the interactions that affect the sustainability of competitive advantage. Finally, we contend that investigating the proposed relationships may even help bring academic researchers and business managers closer together.

# REFERENCES


1. Amburgey, T.L., and Dacin, T.(1994), "As the left foot follows the right? The dynamics of strategic and structural change," *Academy of Management Journal*, 37: 1427-1452.
2. Ansoff, H.I.(1965), *Corporate strategy: An analytical approach to business policy for growth and expansion,* New York: McGraw-Hill.
3. Ansoff, H.I.(1979), *Strategic management*. London: The MacMillan Press.
4. Ansoff, H.I.(1991), "Critique of Henry Mintzberg's 'The design school: Reconsidering the basic premise of strategic management'," *Strategic Management Journal,* 12: 449-461.
5. Ballew, V.(1982), "Technological routineness and intra-unit structure in CPA firms," *Accounting Review*, 57: 88-103.
6. Barney, J.B.(1991), "Firm resources and sustained competitive advantage," *Journal of Management*, 17: 99-120.
7. Blau, P.M., Falbe, C.M., McKinley, W., and Tracy, P.K.(1976), "Technology and organization in manufacturing," *Administrative Science Quarterly,* 21: 20-40.
8. Burns, T., and Stalker, G.M. (1961), *The management of innovation, 2nd ed.* London: Tavistock Institute.
9. Chandler, A.(1962), *Strategy and structure*, Cambridge, MA: MIT Press
10. Channon, D.(1973), *Strategy and structure in British enterprise*, Boston, MA: Harvard University Press.
11. Child, J.(1972), "Organizations structure, environment and performance: The role of strategic choice," *Sociology*, 6: 1-22.
12. Child, J.(1977), *Organizations: A guide to problems and practice*, London: Harper and Row.
13. Child, J., and Mansfield, R. (1972), "Technology, size, and organization structure," *Sociology,* 6: 369-373.
14. Donaldson, L.(1976), "Technology, organizational structure and performance - A critique of the universal generalization," *Journal of Manage-*

*ment Studies,* 13: 255-273.

15. Donaldson, C.(1987), "Strategy and structural adjustments to regain fit and performance," *Journal of Management Studies*, 24:1-24.
16. Emery, F.E., and Trist, E.L.(1965), "The causal texture of organizational environments," *Human Relations,* 18: 21-32.
17. Ford, J., and Slocum, J.(1977), "Size, technology, environment, and the structure of organizations," *Academy of Management Review,* 2: 561-575.
18. Fry, L.W.(1982), "Technology-structure research: Three critical issues," *Academy of Management Journal,* 25: 532-552.
19. Fry, L.W., and Slocum, J.(1984), "Technology, structure, and workgroup effectiveness: A test of a contingency model," *Academy of Management Journal,* 27: 221-246.
20. Gerwin, D.(1979), "The comparative analysis of structure and technology: A critical appraisal," *Academy of Management Review,* 4: 41-51.
21. Hage. J., and Aiken, M. (1967), "Program change and organizational properties," *American Journal of Sociology,* 72: 503-518.
22. Hage. J., and Aiken, M. (1969), "Routine technology, social structure, and organizational goals," *Administrative Science Quarterly,* 14: 368-379.
23. Hall, D.J., and Saias, M.A. (1980), "Strategy follows structure," *Strategic Management Journal,* 1: 149-163.
24. Hall, R.(1968), "Professionalization and bureaucratization," *American Sociological Review,* 33: 92-104.
25. Hall, R.(1977), *Organizationalstructureandprocess,* Englewood Cliffs, NJ: Prentice-Hall, Inc.
26. Harvey, E.(1968), "Technology and the structure of organizations," *American Sociological Review,* 33: 247-259.
27. Hickson, D.J., Pugh, D.S., and Pheysey, D.C.(1969), "Operations technology and organization structure: An empirical reappraisal," *Administrative Science Quarterly,* 14: 378-397.
28. Hinings, C.R., and Lee, G.L.(1971), "Dimensions of organization structure and their context: A replication," *Sociology,* 5: 83-93.
29. Hulin, C.L., and Roznowski, M. (1985), "Organizational technologies:

effects on organizations' characteristics and individuals," *Research in Organizational Behavior,* 7: 39-86.

30. Kell, T., and Carrot, G.(2005), "Culture matters most," Harvard Business Review, 92(5): 22-24.
31. Khandwalla, P.N.(1974), "Mass output orientation of operations technology and organizational structure," *Administrative Science Quarterly,* 19: 74-97.
32. Lawrence, P.R., and Lorsch, J.W.(1967), *Organization and environment,* Boston MA: Division of Research, Graduate School of Business, Harvard University.
33. Miller, C.C., Glick, W.H., Wang Y., and Huber, G.P.(1991), "Understanding technology-structure relationships: Theory development and meta-analytic theory testing," *Academy of Managemen tJournal,* 34: 370-399.
34. Mintzberg, H.(1990), "The design school: Reconsidering the basic premise of strategic management," *Strategic Management Journal*, 11: 171-195.
35. Mintzberg, H.(1991), "Learning 1, planning 0: Reply to Igor Ansoff," *Strategic Management Journal*, 12: 463-466.
36. Montanari, J.R. and Morgan, C.P.(1983), "The impact of technology and functional unit on centralization in organizations," *Human Relations*, 36: 705-716.
37. Newman, W.H.(1971), "Strategy and management structure," *Journal of BusinessPolicy*, 2: 56-66.
38. Orlikowski, W.(1992), "The duality of technology: rethinking the concept of technology in organizations," *Organization Science,* 3: 398-426.
39. Perrow, C.(1967), "A framework for the comparative analysis of organizations," *American Sociological Review,* 32: 194-208.
40. Porter, M.E.(1980), *Competitive strategy,* New York: Free Press.
41. Porter, M.E.(1985), *Competitive advantage: Creating and sustaining superior performance,* New York: FreePress.
42. Prime, R.L., and Butler, J.E.(2001), "Is the resource-based view a useful perspective for strategic management research?" *Academy of Manage-*

*ment Review*, 26: 22-40.

43. Pugh, D.S., Hickson, D.J., Hinings, C.R., and Turner C.(1969), "The contexts of organization structures," *Administrative Science Quarterly,* 14: 91-114.
44. Reimann, B.C., and Inzerilli, G.(1979), "A comparative analysis of empirical research on technology and structure," *Journal of Management*, 5: 167-192.
45. Reimann, B.C., and Inzerilli, G.(1981), *Technology and organization: A review and synthesis of major research findings,* In G.W. England ,A.R. Negandhi, & B. Wilpert, Functioning of complex organizations: 237-250. Cambridge, MA: Oesgeschlager, Gunn, & Hain.
46. Rumelt, R.P.(1974), Strategy, structure, and economic performance, Boston, MA: Division of Research, Graduate School of Business Administration, Harvard University.
47. Saxberg, B.O., and Slocum, J.W.(1968), "The management of scientific power," *Management Science,* 14: 473-489.
48. Thompson, J.D.(1967), *Organizationsin action*, New York: McGraw-Hill.
49. Venkatraman, N.(1989), "The concept of fit strategy research: Toward verbal and statistical correspondence," *Academy of Management Review,* 14: 423-444.
50. Weick, K.E.(1990), *Technology as equivoque: Sense-making in new technologies,* In P.S. Goodman & L. Sproull (eds), Technology and Organizations: 1-44. San Francisco, CA: Jossey-Bass.
51. Wenk, E.(1989), *Tradeoffs: Imperatives of choice in a high tech world,* Baltimore, MD: John Hopkins University Press.
52. Withey, M., Daft, R.L., and Cooper, W.H.(1983), "Measures of Perrow's work unit technology: An empirical assessment of a new scale," *Academy of Management Journal,* 26:45-63.
53. Woodward, J.(1958), *Management and technology,* London: Her Majesty's Stationery Office.
54. Woodward, J.(1965), *Industrial organization: Theory and practice,* London: Oxford University Press.

55. Zahra, S., and George, G.(2002), "Absorptive capacity: A review, reconceptualization, and extension," *Academy of Management Review*, 27(2): 185-203.

# Abstract

## Prerequisite of Superior Performance : Managing Coalignment in a Dynamic Condition

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We draw on well-established thinking in the complementary fields of organization theory and strategic management to develop a model explaining why fit among a firm's competitive strategy, its structure, and its technology is a prerequisite for superior performance. The contributions of this theoretical treatise are twofold. Firstly, it helps reduce the disconnect in thinking that exists between the strategy and organization-theory literatures on business-level issues. Secondly, it reveals the importance of managing the coalignment among strategy, structure, and technology which, in turn, forces recognition that competitive advantage does not exist in a static state but in a dynamic condition.

Key Words : Strategy, Structure, Technology, Managing coalignment

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