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AN ANATOMY OF AUTONOMY: MANAGING PROFESSIONALS

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EXECUTIVE SUMMARY

The most vexing problem in the management of salaried professionals is how to provide them with their espoused right of autonomy while ensuring adequate control of the organization. In this article, Joseph Raelin explains how a standard approach of granting professionals operational autonomy (autonomy over the means or procedures to be used) while according management administrative and strategic autonomy (autonomy over the activities of the organizational unit or over the mission of the entire enterprise) is a convenient norm for executives to adopt in most situations. However, he goes on to illustrate how to manage the critical exceptions: those conditions when professionals ought to be granted administrative and strategic autonomy as well as those conditions when management may actually invade the operational autonomy of the professional.

AN ANATOMY OF AUTONOMY: MANAGING PROFESSIONALS

Joseph A. Raelin

One of the most critical challenges facing modern management has been the art of managing salaried professionals - that is, professionals who have chosen to practice their craft inside an organization rather than in private practice. As we know, furthermore, there is increasingly less choice in the decision to become "salaried" since professional practice, take medicine as a good example, is becoming increasingly "corporatized." Most estimates place the percentage of professionals in the workforce at about 20 percent by 1990 of which 75 percent will be salaried.¹

There has been at least 30 years of documentation suggesting that these organization-type professionals may be more difficult to manage than their nonprofessional counterparts in employment.² The reason for this seems to be that professionals and the helmsmen of their organizations - the management - come from quite different cultures. Most professionals are socialized through their discipline and culture to carry out their technical responsibilities as members of a professional group. Once in practice, many also retain their professional ethos through identification with other like professionals who are willing to make a lifelong commitment to professional values and standards. These values and standards are oftentimes upheld through professional associations, which also establish ethical guidelines to shape proper norms of conduct. Managers, in contrast, undergo a different kind of socialization. Their formal education is typically of shorter duration and emphasizes interdisciplinary and practical approaches to problem solving. They are further expected to learn the bulk of their craft on the job. The corporate culture defines the managerial role essentially as articulating the goals of the organization and devising procedures to meet them.

The conflict between professionals and managers is not always clear-cut. Some managers and professionals simply buy into the other's culture; plus there is the complication of professionals becoming professional-administrators. Further, not all professional environments are the same; some (research labs as a good example) cater to professionals. Finally, not all managers are the same; some are very adept at establishing the right conditions for professional motivation.

Nevertheless, for many managers of professionals, there is a dilemma of maintaining control while affording those professionals who want it their professional autonomy, that is, their interest in pursuing their craft according to their own schedules and procedures and in being controlled by no less than their own peers. In short, control clashes with autonomy, defined as the professional "holding sway," from the Greek

autos (self) and *nemien* (to hold sway). Consider the following scenario:

Louise, the senior accountant for the Equipment Division of Leisureland, Inc., is approached by Dave, her manager. "Your last report stated that we're way out of line on our inventory. Your analysis seems as tight as always, but let's hold it until the next pricing exercise. You know, we've got to keep our distributors on board." Louise replied quickly, "I'm sorry, Dave, but one more month like the last one, and we'll have dipped into negative cash flow one time too often. We've got to go to JB with this information, that's our job." "Hold on Louise!" insisted Dave. "You know we'll smooth out our cash flow. "Not this time," Louise intoned. "The numbers don't lie."

Does this scenario sound familiar to you? If you're a manager of professionals, how often have you had to confront attempts by your professional associates to challenge your authority?

Thus, there is the potential and actuality of a significant clash of cultures between managers and professionals over the issue of autonomy. As I have indicated, the problem varies considerably among individual professionals and organizations. But as the above example suggests, in some instances, the problem can become sufficiently severe as to assume a conflict of interests regarding basic ethical questions.

Fortunately, professional autonomy can be managed (as it is quite intuitively by many effective executives) by a rather simplistic, standard organizational arrangement. Its simplicity masks its utility. The arrangement calls for actually granting professionals their right to a particular brand of autonomy. To explain this approach, a short digression is in order.

Autonomy is best analyzed by considering its three components (in a similar vein as Talcott Parsons³ did in his analysis of the levels of bureaucracy): strategic or institutional autonomy, administrative autonomy, and operational autonomy. Strategic autonomy entails the freedom to select the goals and policies guiding the organization. The agents responsible for this level of autonomy are responsible for distinguishing the corporate mission and mediating between their organization and the wider society of which it is a part. Administrative autonomy constitutes the responsibility to manage the activities of a unit within the organization and to coordinate the tasks of that unit with other units in the organization. Besides this internal function, the agents responsible for administrative autonomy also have an external function, namely, mediating between their unit and the users of their products or services. They also contribute to corporate policy by reacting to the direction of the organization articulated at the strategic level. Operational autonomy, meanwhile, is having the freedom, once the goal or problem has been set, to attack it by means determined by oneself but within administrative and strategic constraints. The agents responsible for this

level of autonomy carry out a technical function relating to a particular set of products or services but also relate to the other levels, although most directly with the administrative agents.

Now, the simplistic arrangement I referred to above for managing salaried professionals is to place strategic autonomy into the hands of executives, administrative autonomy in managers, and operational autonomy in professionals. However, there are clearly conditions when each of the parties should "encroach" on other autonomy levels. For example, because of the likelihood of more frequent contact with managers than with executives, professionals are more prone to encroach on administrative than strategic autonomy. Nevertheless, as I shall subsequently argue, there are conditions when professionals should be granted strategic autonomy. One proposed distribution of focus on these three levels of autonomy by professionals and management is depicted in Exhibit 1. This distribution is based merely on personal observation and experience and requires empirical validation. Further, it is proposed as a median distribution since such conditions as the nature of the organization will cause aberrations. The exhibit proposes that some 80% of concentration of the professionals' activities concerns the domain of operational autonomy with the corresponding 20% residing in management. The figures then switch to approximately 30% of professional concentration on administrative autonomy and 10% on strategic autonomy.

In this article, I will first explore the merits of the proposed standard view of distributing autonomy. Although an intuitively compelling arrangement, it is not embraced by numerous managers and executives who either undercontrol or overcontrol their professional staffs. Then, I wish to focus the bulk of attention on the aberrant conditions, which, in my view, can truly discriminate the top from the above average executive performers. One needs to know when professionals should considerably impact managerial decision making as well as when executives should rightfully invade the professional bench. Understanding and managing these latter conditions is required if we are to devise a realistic, comprehensive framework for managing salaried professionals.

THE STANDARD VIEW

Strategic Autonomy

With but rare exceptions, perhaps in some university or industrial research environments, most professionals will accede to the right of executive management to establish the goals for the organization and to specify how the units in the organization will interact to achieve these goals. If professionals are given the

authority to develop proposals on their own, these proposals are typically reviewed for their conformity to the organization's mission.

The strategic mission of the organization, then, represents what the corporate goals are. Organized at the founding and subsequently reinforced through formal pronouncements from the executives and/or through less formal but obvious behavior in response to market challenges, the mission distinguishes the true competencies of the organization. It addresses the purpose for which the organization will be accountable in society. Without a strategic mission, the organization would eventually cease to exist since, unless mandated by government authority, it would hold no unique niche in the competitive environment.

Corporate management expects its professional staff to work on assignments that are determined to contribute to the strategic mission. There is unfortunately a mythology that the professional is no more than a bookworm with hard-rimmed glasses who in true Garboesque style simply "wants to be left alone." Working in a totally independent fashion, however, would contribute to very limited personal or social ends. The professional is no less a social animal than any other employee. On joining an organization, the professional recognizes the give and take of the psychological contract ironed out with the employer. Each party wishes not only to advance his or its own needs, but to contribute to the achievement of the other's goals. Problems arise mainly when there is confusion about the goals each is striving to reach.

This is where strategic mission becomes so critical. Professionals, like all employees, need to understand the guiding values that inform the organization's spirit and purpose. These values need not be official, that is, promulgated by executives through any formal means; rather, they represent a whole range of shared models of social action containing real and ideal, formal and informal, planned and enacted elements. The modern organization brings together disparate cultures within a single framework. To have an operative, strategic culture that permeates these diverse subcultures in a way that unifies broad streams of behavior, it is necessary that there be convergence on what executives do and say. Consistent behavior can do more to instill a sense of strategic mission than any formal document.

In today's complicated organizations that are, for example, multidivisional and multiproduct or that operate in fast-paced technological environments, it is unfair to expect top management to produce a strategic vision on cue. Strategy is sometimes a property that emerges rather than is intended and may benefit from occasional nonconformance to current directions. Yet, management can seek to define broad boundaries around what the organization is doing. Organizations that have strong cultures, in this sense, do not need to rely on excessive rules and procedures. After an intensive period of socialization, i.e., learning the ropes,

professional employees simply know what to expect. They can maintain a balance between conformity and autonomy because they know what the standards are and how far they can stretch the boundaries of acceptable behavior.

Failure by management to articulate the strategic aims of the organization leaves a void that professionals will instinctively try to fill. For example, in the R&D area, basic research scientists will attempt to select their own work assignments. Their managers, many of whom have scientific backgrounds, will not necessarily object to their insistence on this task autonomy but may try to curtail the number of projects they work on. Executives, meanwhile, may find out too late that the scientists are not engaging in projects of strategic relevance so that even forthcoming innovations could not possibly be commercialized or even used to perfect process technologies used by the firm.

A good example of inadequacy of strategic mission articulation occurred in the early 1960s at RCA. David Sarnoff in the original design of the RCA Spectra 70 computer series wanted to ensure complete compatibility with the IBM 360, especially since RCA couldn't compete with IBM on field service. However, his intentions were not made strong enough since his computer scientists introduced a number of improvements on the Spectra 70. Unfortunately, these improvements caused more problems for RCA than they were worth since virtually each one required new instructions for IBM users, thus destroying full compatibility and resulting in a blow to RCA's potential success in the computer business.

Left to their own devices, software engineers like to experiment with many ideas for redesigning a system in order to incorporate some nifty new features or improvements. Yet, without conceptual integrity, the parallel of strategic mission in this field, a system may fail to attract a large enough user market since its complexity may not be transparent.

In a recent study,⁴ my colleagues and I found that professionals who were encouraged to use their own absolute initiative in performing their jobs, and who were given free rein to challenge management decisions were very likely to adhere more strongly to professional than managerial standards and to sustain professional over managerial allegiance. Ultimately, executive management must make the final decision about which type of product to support and how, consequently, to allocate the company's resources. Allegiance to one's profession cannot take precedence over corporate loyalty. The boundary of the organization, particularly in a market economy where resources are finite, matters; as a result, management cannot compromise on loyalty. One is not an employee of the profession. Therefore, strategic autonomy cannot be viewed as an inherent right of the professional who chooses to base his or her decisions on the

standards set by the profession, but as a dialogue that recognizes the constraints of organizational practice. Thus the role of management should be to empower the professional staff to decide how they will implement the tasks assigned. In a company which basically performs defense contract work, I observed that occasionally some of the technical professionals would become disgruntled when their company refused to let them work on projects requiring new technologies and competitive procurements. Yet, as a reliable contractor expected to deliver certain products, the company could simply not accommodate these professionals, as it was not within its mission to enter competitive bidding markets.

It should be noted that while CEOs are responsible for the overall corporate mission of the organization, each principal function within the organization can be said to have a sub-mission which contributes to and hopefully integrates with the overall mission. The sub-missions typically become the responsibility of functional executives. In R&D, for example, it is important that the executive in charge of that function articulate in some form the corporate technology goals - be they product enhancements, new products, or process improvements, the core technologies on which the R&D units tends to rely, and the interconnections between R&D and the other key corporate functions.

Administrative Autonomy

Where strategic autonomy is primarily the domain of the executive manager, administrative autonomy is primarily the domain of the unit or middle manager which as an organizational role runs the gamut from department head to first-line supervisor in charge of a professional team. The role names and responsibilities vary across firms even within the same industry and can occupy a number of levels. Within professional service firms, for example, this same position may be referred to as manager, senior manager, senior staff manager, or principal. The essence of the role is to manage the activities of a group or department and to coordinate the tasks of that group with other units in the organization or with outside groups. Since professional employees typically know best how to perform specific task activities, the role of the unit manager is more one of clarifying task boundaries or providing support and resources for operations. Unit managers are also observant of the direction of the organization and use their discretion in seeing that the goals of the organization are carried out. It is comparable to governmental operations wherein a law might be passed and funds appropriated to remedy a certain problem, be it crime, bilingual education, or abandoned children, but the actual mechanism of creating a program to implement the law is left up to the administrative agencies.

Unit managers thus cannot avoid assuming a partial strategic role. As members of the management team, they can be active contributors to overall corporate policy to the extent they represent the means and points of view of their units. In this regard, they also function as teacher, making sure that the top managers have more than a cursory knowledge of the technology employed in their unit. Executives willing to heed these points of view will allow policy to emerge as a negotiation of the unit manager's concerns along with consideration of the entity as a whole.

In professional environments many unit managers are selected rightfully from the ranks of the professional staff. With proper training and development which seek to overcome the skill differences between professionals and management, professionals can make excellent professional-administrators especially since they typically understand the technology and technical resources required to get the job done.⁵ Although their command of technical details may no longer match the leading-edge knowledge possessed by the professional staff, unit managers are sufficiently close to the core technology of their units to be expected to direct their activities. Further, once granted adequate administrative autonomy, they are able to respond quickly to changes in their units without always having to "check upstairs."

The unit manager's role may entail a host of administrative, operational, and financial activities beyond unit identification, such as task clarification, salary distribution, resource provision, technical assistance, conflict management, or financial control. It also typically entails a planning function requiring judicious handling of information on unit activities. For example, a nurse administrator has the opportunity to plan a department's future through the use of numerous management information reports, including statistical and financial data on patient days, utilization of personnel, and hours of care paid and worked, as well as data related to the costs or expenses per patient day for nursing services rendered. Although this information is intended to facilitate administrative accountability on the part of the nurse administrator, sharing these data with the professional nurses on duty and helping them integrate these with the results of their own nursing quality assurance activities provides them with the means to assume operational autonomy, as we shall subsequently demonstrate.

Unit managers also work at the boundary of their unit to exchange resources or information with other units both inside and outside the organization, and with top management. Some of this activity may be within the supervisor's role designation, while some may actually bypass the formal bureaucracy. Department managers, for example, may seek to form coalitions with other groups to advance the mission of their department. Oftentimes, they are in a position of needing to "sell" the services or value of their group

in which event an intimate knowledge of their professionals' activities is required. Thus, a unit manager in charge of a product (say an air conditioner) must negotiate separately with specialists in design, engineering, production, marketing, and distribution to coordinate all the functions involved in making and selling his/her product. This coordinative function of the unit manager may well be the most critical. In a computer manufacturer, a product engineer attempted to push a disk drive project into the marketplace well before some of the other engineering specialists had cleared their own specifications. Relying on electric, mechanical, and magnetic technologies, a disk drive requires considerable integration within the project team and is usually the responsibility of the project manager. The young product champion in this case simply could not tolerate any delays, which the more experienced middle manager accepted as a reality of the development process.

The thrust of the work of the unit manager is thus more akin to orchestration than direction. The administrator's job is foremost to provide the conditions wherein professionals can pursue their craft without having to concern themselves constantly with mundane operational matters. Professionals tend to be sufficiently disciplined to work on long stretches of their assignments relying upon self-management and peer consultation rather than supervisory oversight.

The proper behavior of the unit manager when dealing with sophisticated employees was described well by Sayles and Chandler.⁶ They saw the job as one that "...widens or narrow limits, adds or subtracts weights when tradeoffs are to be made, speeds up or slows down actions, increases emphasis on some activities and decreases emphasis on others..." In other words, one cannot precisely tell self-directed people what to do, but one can set them upon the proper course and occasionally nudge them to keep them on track. For example, if an architect were to become so engrossed in a design that he or she neglected to obtain feedback from surrounding residents, the project manager might insist that the architect spend some time out of the office. Similarly, attending physicians are notoriously ignorant of the costs of laboratory and radiological procedures. By making them aware of charges to patients for these services, hospital management can at least introduce costs as one criterion in diagnostic decisions. Finally, even in basic research, a good deal can be said in advance about expected discoveries. One can anticipate their probable outlines and timing and their probable impact on relevant technologies.

Researchers writing in the area of self-management seemed to have best captured the leader behaviors most appropriate for unit managers.⁷ In the spirit of trying to allow professionals to use their best instincts, they should exhibit encouragement of professional self-criticism, self-goal-setting, self-evaluation, and

self-reinforcement and expectation. The first three behaviors are self-explanatory; the last refers to the administrator's need to encourage professionals to be self-reinforcing and expectant of high standards of performance and service. These are essentially the behaviors practiced by head nurses of most primary care nursing units at the Beth Israel Hospital in Boston, a hospital reputed to have among the highest nurse retention rates in the country. Unit nurses, first of all, are encouraged to assume much of the responsibility for training new employees by working under a "buddy" system. New nurses are assigned a "buddy," with whom they work closely to learn unit procedures. Unit nurses are also encouraged to develop unit goals and methods of patient care delivery through frequent meetings with the head nurse. They are also responsible for managing their own patient load, and they participate actively in unit scheduling and hiring new staff. Finally, the head nurse encourages nurse professionals to manage their performance problems and conflicts among themselves.

Operational Autonomy

So, now we come to the level of operational autonomy. Operational autonomy is control over the means and conditions or processes and procedures of one's work. I have said that this form should be the principal domain of the professionals. This is due to the fact that their work generally requires a great deal of flexibility, innovation, creativity, and intellectual analysis; it also tends to operate under ambiguous standards, lack of structure, and uncertainty of outcomes; nevertheless, it is relatively well understood by them. Further, in professional service environments, much of the work requires specialized interaction with clients whose problems can be unique. Hence, many of the traditional supervisory functions are transferred to the professional employee in the form of self-supervision and peer control.⁸ Professionals know best how to pursue solutions to the complicated problems assigned to them. If they have difficulty, their inclination is to seek help from peers. One's peer group may extend beyond the discipline to the community of specialists who share a type of competence with cuts across the enterprise. A nurse in an intensive care or psychiatric unit might need immediate consultation with another specialist to diagnose and solve highly variable patient emergencies. Since the professional is closest to the task uncertainty, he or she must be given autonomy to solve the client's problem. No amount of external control in terms of standards or schedules will make the solution more effective.

Control over the means of practice by management can be wasteful, therefore, since the methods for

doing the work are established by the profession and inculcated within the professional. Hence, control of results is really the only effective means to control professional behavior. Of course, the professions must supply generally-accepted criteria to evaluate effectiveness so that both the professionals and their managers (who might be professionally-trained in the respective discipline under supervision) can assess progress at periodic milestones. Notice that the emphasis is on effectiveness rather than efficiency, the latter suggesting a more definable metric. Outcomes in much professional work are difficult to predict; nevertheless, standards of performance need to be formulated, if only for periodic estimates. Since outcomes from professional activities and interventions often require time to take effect, evaluation cannot be immediate. Nevertheless, it has been suggested that one of the problems the social work profession has experienced in establishing itself as a full profession has in fact been a failure to establish policy, program, and service effectiveness guidelines through such forms as goal and priority setting, performance standards, and information for planning and direct services intervention.⁹

Managerial interference in the means of practice would require a method to standardize and streamline operations, to make things occur more quickly, or, at least, more efficiently. Although potentially a noble goal, it flies in the face of professionalism. Take the instance of attempting to discount professional services, as Hyatt Legal Services has done in creating a chain of legal clinics. Although a very innovative, entrepreneurial idea - and, in fact, at one point Hyatt employed some 630 staff lawyers nationwide - it is fraught with danger if the essence of the business is to build up caseload at the expense of individualized service. Until the time when professional legal education in this country is altered to emphasize its business content, it is unlikely that the practice of law will be able to be standardized.

There is no question that the boundary between operational autonomy and administrative autonomy can become blurred. Let's consider the project engineering environment as a case in point. I would suggest that the list below constitutes activities which might fall under the heading of administrative autonomy, and thus, become the principal domain of the project manager:

1. Selection of personnel
2. Salary decisions
3. Promotion decisions
4. Primary evaluation of individual and group performance
5. Arbitration of technical grievances
6. Modification of project policies

On the other hand, the activities below, in my view, would fall under operational autonomy and, thus, would become the principal domain of the engineers:

1. Modification of project procedures
2. Final approval on engineering design and methods
3. Review of project reports
4. Preparation of cost reports
5. Preparation of scheduling reports
6. Small equipment purchases

Besides having left out some activities, project engineering managers and professionals might quibble with me on the placement of these items. Yet, by suggesting that the first list should become the domain of the manager does not mean that the professionals, as a result, have no involvement in the disposition of these activities. Professionals ought to be consulted in the administrative decisions; however, they may not wish to *participate* in them. Hence, operational autonomy is not necessarily consistent with participation in administrative autonomy. Many professionals may be perfectly willing to let management take responsibility for the administrative decisions of their group, as long as they do not encroach on their operational and technical procedures and provide them with adequate resources and discretion. Professionals, as we suggested earlier, are also generally willing to abide by a well-defined corporate mission. There are conditions, however, when they must be able to infiltrate administrative and strategic autonomy - as I shall outline shortly.

A word is still in order, however, regarding the involvement (again, not necessarily participation) of professionals in strategic decisions. What makes the articulation of mission particularly difficult is the deformation that occurs as it gets translated through the administrative ranks. Mission statements become goals, goals become objectives, and objectives become targets. At some point, goal displacement occurs, especially where a goal is accepted without its inherent content, or where the measurement of the goal becomes more important than the goal itself. Professionals can be helpful in keeping the mission on course in instances where the mission entails the provision of professional services. They are less likely to overlook the essence of their professional services to the extent of their commitment to the client. Hence, good teachers will be reluctant to teach for high test scores unless the scores are a by-product of the first order of business - learning. Administrative reliance on professional autonomy in this situation is critical to keep the mission on course, to prevent goal displacement, and to develop reliable measures of performance. In the latter instance, this may also include the professional capacity to analyze the limitations of the control measures in use.

THE ALTERNATIVE VIEW

The standard view holds that administrative and strategic autonomy reside in management whereas operational autonomy belongs to the professionals. I have maintained that this arrangement, if followed by executives and managers, would work reasonably effectively in most situations encountered in the management of professionals. The discussion up to this point has provided some justification for this standard approach, especially for those executives who have a tendency to overcontrol professional work while holding back on strategy dissemination. But what of those conditions when the converse holds true - when professionals ought to be granted administrative and strategic autonomy, or those when managers ought to be granted operational autonomy?

There are certainly times when professionals need to participate actively not only in the direction of their unit but of the enterprise as a whole. This is consistent with what situational leadership researchers have been telling us for decades - that under certain contingencies, employees can take over the leadership function of the organization. It has been shown that their professionalism, normally translated as their expert knowledge and sincere commitment to accomplish the task, can even serve as a *substitute* for leadership.¹⁰ Granting strategic autonomy, in particular, to professionals is also consistent with the distinction Charles Manz¹¹ has made between self-leadership and self-management. Self-management allows considerable discretion regarding what the professional ought to be doing in relation to an assigned task or set of tasks. Self-leadership, on the other hand, allows the professional to question why he or she should be doing the task in the first place.

Similarly, managerial intervention in operations is legitimately called for under certain conditions, especially when the mission of the organization cannot be carried out without such intervention. Although good managers of professionals realize that the domain of means is normally the safe haven of the professional, there are circumstances when managers need to increase oversight, enunciate clearer policies, standardize operations, and even impose procedures and schedules. Normally, these actions are undertaken by the unit managers, but, in some instances, they are initiated by executives. In the discussion which follows, although for simplicity purposes I shall refer to management as a single role, from time to time, I shall make distinctions between the middle and executive levels. Similarly, although professional "encroachment" is typically into administrative autonomy, I shall also demonstrate when it may fall over into strategic autonomy as well.

Professional Control of the Ends - Administrative and Strategic Autonomy

Exhibit 2 lists the conditions under which professionals ought to be granted administrative and strategic autonomy. The list has been developed through extensive literature search and interviews with both managers and professionals. As is common in exploratory research, the list of conditions was constantly revised through successive interview sessions. There was no attempt to test any one list; rather, the interviews were designed to establish the most generalizable conditions for professionals to control the ends. The conditions are grouped into four categories: individual, job, organizational unit, and organizational variables. Future research will have to determine whether there are significant interaction or combination effects; in other words, we don't know whether some of the variables need to go together to spur consignment of administrative or strategic autonomy. Readers will note, however, that some of the conditions are already grouped because of perceived interaction. At this point, I suggest that managers use their discretion in granting this autonomy on a variable by variable, and case by case basis. In what follows, I hope to explain the rationale for each condition and provide some examples of use.

Individual Variables:

1. High performer/proven contributor - A professional who has demonstrated an ability to get things done, who has contributed significantly to the organization's mission, and who needs more freedom in which to operate, may be an excellent candidate for increments of administrative autonomy as well as strategic autonomy. Such an individual may be allowed to work on independent projects with little oversight, may be granted more resources than is typical, and may be even encouraged to expound on his or her ideas throughout the organization by assuming a mentor and/or fellow role, by giving seminars, or by being invited to conference with top executives. A good example of this condition is the case of IBM and its recent noble laureates, Mueller and Bednorz. There's been much discussion about superconductivity research in the past few years, some scientists openly purporting that ceramic superconductivity materials constitute the most significant electronic discovery since the invention of the transistor in 1947. As intriguing as the research itself has been, IBM's role in supporting the work of Swiss physicist, K. Alex Mueller and his protege, J. Georg Bednorz, has been questioned. Apparently, because of the preposterousness of this line of research, combined with the raw time that the scientists were devoting to it away from their expected duties, Messrs. Mueller and Bednorz were forced to keep much of their work secret from IBM management.

Although some companies are known to allow some bootlegging in their laboratories, IBM has an alternative image of running a tight ship. Nevertheless, Professor Mueller due to his past exploits on other numerous scientific projects was made an IBM Fellow, which, as the company's top scientist designation, gave him the express freedom to work on such discretionary activities as superconductivity research.

Corporate indulgence of key contributors, it should be noted, is rarely without some self-interest on the part of the organization. On the one hand, management often recognizes long-term potential in sponsoring the projects of these talented individuals, on the other, it realizes that without such support, many of these professionals might simply go to work for other organizations or perhaps even start their own businesses, either of which could lead to subsequent competitive pressures.

2. Broad-based - Although professionals may initially wish to specialize in order to make their mark in their organization, at some point, some may wish to expand their horizons. Those that succeed in broadening, that is, who successfully confront a variety of new problems and initiate effective solutions, may be eligible for increments of administrative autonomy. This process of first specializing and then generalizing occurs in many law firms.¹² Associates typically begin by taking on special assignments and concentrating on a narrow area of the law. If the young lawyer performs well enough in the specialty, he or she may next begin to receive assignments from some of the partners, a work pattern that begins the broadening process. Those who can pass the test of working for the most powerful partners may themselves make partner. Although partners may develop special areas of expertise or establish steady client relationships, they like to be flexible enough to entertain new assignments. The business environment affecting law firms is hardly stable. More and more large institutions are beginning to bring their legal work in-house rather than rely on a single law firm for all their legal needs. Legal professionals have to be ready, therefore, to handle a variety of assignments if their firms are to compete successfully.

There is a purported relationship between tenure and skill broadening. In other words, professionals who have been with an organization for a period of time will seek to develop their *organizational* career by extending their skills, engaging in new and different tasks and projects, and, perhaps eventually, taking on a mentorship role with up-and-coming young professionals. Tenure is not included as a condition for administrative or strategic autonomy, however, since it is so conditional on the personal development of skills and on positive identification with the organization. Unfortunately, we know of too many cases of long-term employees who have stagnated or whose contributions have become routinized.

3. responsible and critical position

4. highly trained

5. shares organizational goals - the remaining individual variables are discussed together because in this instance, the last condition, "shares organizational goals," appears to moderate the other two.

Professionals who are in responsible and critical positions and who are highly trained would be assumed to use increments of administrative or strategic autonomy in behalf of the organization. Some organizations employ "gurus" or experts who are virtually indispensable when it comes to the development of leading-edge technology. In some instances, the professional may possess unusual access to information upon which the rest of the organization relies. In most accounting firms, it is likely that there is always one or two staff members who seem to get the inside information on the latest tax reform law. School principals may need to rely on a social service professional to interpret the special education laws and its regulations and requirements.

Similarly, professionals with advanced training, Ph.Ds, for example, because of a presumed wealth of expertise and information, may be granted extraordinary freedom in their units or throughout the organization. We know, however, that such professionals tend to be more "cosmopolitan" than those with less formal education. Cosmopolitan scientists are inclined to be more theoretical than applied, more interested in advancing science than solving immediate organizational problems, and sometimes even more interested in publishing their work than contributing to teamwork.¹³ In order to trust such professionals with increments of autonomy, it is critical that they share a common vision with their organization and that the source of any altruism on their part be the organization, at least on an equal plain with the wider professional community.

Job Variables:

6. client involvement - Since so much professional work entails the provision of services, there is typically a fair amount of client involvement. Indeed, in professional service firms, the client becomes a virtual "partial employee" of the firm. To the extent the firm can induce the client to clarify the nature, scope, and parameters of the problems to be pursued, the greater the chance of successfully meeting the client's needs. Client relationships in the industrial sector, however, are also critical as a valid and reliable source of feedback on products, services, and innovations. Again where professionals have acknowledged an interest in organizational goals and have displayed their loyalty, increments of autonomy should be granted

within certain jobs to allow more initiative in handling client affairs. In management consulting, for example, the strategy of "account management" would encourage a professional to service the full needs of the client, not just the specialized area which may have precipitated the initial contact.

7. high-level - It goes without saying that just as certain professionals are critical performers in the organization, certain professional jobs are also sufficiently critical or high-level to warrant increases in administrative or strategic autonomy. The job of senior accountant in a corporation, for example, may have strategic value when it comes to capital investment acquisition and allocation decisions. This variable, however, is highly contingent upon particular organizational circumstances. In some companies, the strategic value of the top accountant job may be overlooked due to executive access to management information systems.

Organizational unit variable:

8. strategically vital or involved in internal technology transfer - Some units in organizations are specifically assigned a strategic function or, by virtue of their success, assume a strategic posture. Industrial organizations dependent upon new product introductions will frequently depend on their basic research units in this way. For example, camera companies at this moment in the technological life cycle are most likely very deferential to their research units working on vibrant color reproduction. Other units may have an express technology transfer function, and hence are granted strategic autonomy. A petroleum company has organized a science advisory committee which attempts to foster synergistic relationships among the company's leading researchers. Similarly, a group within a management consulting firm became expert in just-in-time (JIT) distribution systems. Within a short period of time, this area became the leading specialty of the firm, and it became the responsibility of this group not only to keep ahead of its business but to support the firm's other groups who were coming on line in this emerging field.

Organizational variables:

9. open, innovative, and growth-oriented

10. relies on professionals in its mission and mission is emerging - These conditions virtually all go together since they essentially characterize an organizational environment which is both receptive to and responsive to professional initiative. The word, "organic," is sometimes used to describe this type of

organization.¹⁴ In organic enterprises, authority is typically decentralized, there are few formal rules and procedures, knowledge and skill govern the work more than role, status and rank are de-emphasized, and there is flexibility among units. This is opposed to hierarchic structures where there is more emphasis on standardized policies, procedures, roles, and rank. Organic firms also foster interpersonal openness, experimentation, trust, and risk-taking behaviors - all conducive to professional autonomy. Organizations of this type also tend to be interested in innovation - that is, in encouraging ideas which can improve products and services or reduce their costs, lead to new uses of existing products and services, or develop entirely new products and services. Finally, many of these organizations are interested in growth, whether because this constitutes their stage of organizational development or maturation, because they see innovation as endemic to their mission, or because the rate of introduction of new products or services in their industry basically requires it. Selective expansion in the administrative and strategic autonomy of professionals can contribute to the organization's mission provided, of course, that they agree with the mission and conform to such performance criteria as economic and technical feasibility. The familiar creation of so-called "skunkworks" can be an example of structuring a separate unit without bureaucratic fetters in order to increase the innovation potential of professional groups.

A somewhat distinctive organizational type which may have many of the characteristics of the organic organization described above is one which is purposely built around professional contributions. In fact, Etzioni¹⁵ referred to these as "autonomous" organizations and referred to their operation as being in part dependent upon professionals for goal definition and implementation and performance standards development and maintenance. Many universities are of this type, especially those which recognize that reputation and consequent marketability depend upon the productiveness of their faculty. Hence, in emphasizing research and publication, they may give faculty a virtual free rein. Many professional service firms, especially those which are "practice-oriented,"¹⁶ fall under this category as well. Practice-oriented as opposed to business-oriented firms typically have as their major goal the opportunity to serve others and produce examples of the discipline they represent. Their bottom line tends to be qualitative as they are more interested in the ingenuity of their solution rather than the tangible rewards it may bring. Hence, firms of this type tend to engage their clients in planning interventions, recruit career-oriented professionals, promote from within, and focus on the professional quality of their work.

The last part of the tenth variable should be noted. It is critical that firms which accord greater administrative and strategic autonomy to their professionals also have an emerging mission. Those whose

mission is already well-defined may not be able to give sufficient elbow-room to the professionals. A small engineering consulting firm was primarily in the business of environmental testing. Its vice-president told me that some of the chemists, however, would continue their work on individual tests to the point of perfection, beyond levels which were "good enough" to meet the standards of the job. Such efforts by a critical mass of the lab's professionals would quickly have doomed the business which was operating on narrow profit margins to begin with.

Managerial Control of the Means - Operational Autonomy

Exhibit 3 lists those conditions when management might legitimately intervene in the professional domain of operational autonomy. Some of the conditions readers will note are merely the reverse of those conditions cited in Exhibit 2 and discussed above. Others are peculiar to this exceptional practice. Although the interventions under these conditions are typically by unit or middle managers, in isolated circumstances, executives may also have to invade the professional's operational autonomy. As in Exhibit 2, these conditions were developed through literature search and intensive interviews. They are categorized into four types, and the discussion will proceed accordingly:

Professional variables:

1. poor performers, demotivated, insecure, or new - Managerial control over means becomes especially urgent under conditions of poor performance. Peer relations work well in supporting professional development activities, but do not adequately control deteriorating work conditions when caused by collegial breakdown. Professional service environments in particular are vulnerable since they are often characterized by diffusion of authority and overdecentralized decision making among loosely coupled units. In one social service agency, a staff professional wasn't doing her job adequately and her lack of performance was affecting the performance of others. The director failed to confront the professional due to both personal lethargy and fear of legal reprisals. As a result, coworkers began to spread rumors about this woman's lack of professionalism, and she responded with countercharges of racial discrimination. Factions lined up behind the opposing forces, and the work of the agency ground down to a halt.

Although not the same condition as poor performance, the state of demotivation may lead to reduced performance if not addressed early enough. Demotivation, which in professional service environments is

also referred to as burnout, has both personal as well as work effects. It also tends to involve a lowering of personal and professional standards and of personal responsibility for outcomes. Hence, it calls for managerial involvement at least in airing the source of the emotional detachment, which may as likely be non-work as work-related.

Professionals who are insecure or new to the unit or organization may also require occasional managerial support regarding the means of their work. These individuals may be subject to being co-opted by others more powerful or experienced in the organization. Managerial intervention in these cases should be selective and contractive in order to allow the professionals to develop their operational autonomy and to overcome their insecurity.

2. overspecialized or engaging in many discretionary activities - Professionals have a tendency to become overspecialized, that is, to practice their specialized competencies and serve their professional interests to the exclusion of organizational considerations. In these instances, managers should see it as their responsibility to remind these professionals that their tasks must eventually relate to the organization's mission. This type of intervention may actually be helpful to the professional who, without broadening experiences, may become pigeon-holed as a specialist and who, as a result, may lose marketability if the specialty becomes outdated or is no longer in need or in vogue within the company. Finally, managers need to insure that overspecialized professionals do not become paternalistic in their dealings with customers, suppliers, government agents, or other so-called "nonexperts." Indeed, nonexperts have been known to make significant contributions to professional knowledge and cannot be overlooked.¹⁷ Agricultural scientists developing new seed strains, for example, have been known to benefit enormously from talking to farmers who have worked the land. The farmers, having an intuitive grasp of the regional ecology, can predict whether the new seeds will be vulnerable to certain predators, plant diseases, heavy seasonal rainfalls, or high winds.

Managers may need to be equally wary of some professionals who, on the other side of the coin, have managed to engage themselves in many discretionary activities within the company. Although these professionals can be extremely resourceful and in some instances deserve having a free hand, without some controls, they can lose sight of the "big picture."

Job Variables:

3. Nearing a time limit - Of all the conditions for managerial control over means, none is more

controversial than time. In fact, in my presentations to various professional groups, this particular variable has raised considerable ire. Professionals generally believe that no amount of pressure to perform their specialized tasks more quickly will result in a better or even more efficient outcome. Scientists, in particular, have argued that their work requires open-endedness. The facts or answers for which they search are hidden out there in Nature. No milestone or attempt to block out stages of their discovery in advance will ever work. Although I agree with these arguments in principle, I would suggest that a distinction can be made, with regard to the condition of time limits, between applied and basic professional work. Basic research in attempting to expand the current boundaries of theory cannot be time-tabled. Applied or "commercial" work, however, in seeking to use professional theories or knowledge for specific purposes can at least be loosely scheduled. Glitches, of course, will develop, but they can be explained and their debugging can become part of the development process. Hence, managers must be very careful in deploying time schedules; at a minimum, professional staff need to control much of the planning of the schedules. Those working in applied domains, however, should be held accountable for their work.

4. tasks are not clear and the manager knows how to clarify them or introduce

some relevant skills - This condition may seem inconsistent since I have already stated that professionals merit operational autonomy due to the fact that their work is uncertain yet reasonably familiar to them. Nevertheless, there may be situations when their unit or project managers may be sufficiently informed technically to clarify the assignment being done or to introduce some skills that may be helpful in solving the professional's task problems. In other instances, the manager may be called upon to clarify the boundaries or the agenda of the professional's work. The leadership style called for in this situation is give-and-take consultation or negotiation. In other words, the manager may arbitrate among points of view by engaging in such behaviors as prodding, suggesting, pushing, or choosing among alternatives.

It should be noted that intervention of this sort will be tolerated only when the manager is competent technically. At Genentech, perhaps our premier biotechnology company, vice president of research, David W. Martin, Jr., has been known to pull the plug on projects that, though interesting, were not consistent with the company's mission. He also has been known to strip away a scientist's technicians or equipment if the researcher perseveres after the project has gotten the axe. Yet, company scientists have hung in with Martin out of a deep respect for his own technical knowledge. His prestige is sustained by a reputed regimen of at least 25 hours per week spent reading the relevant medical and scientific journals.

Technical knowledge need not be the sole reserve of unit managers. It is my view that our executives

should also retain an intimate knowledge of the technology of their enterprises. Sony, for example, still reserves half of its directors' seats for physicists. Its top management is also made up of technologists. During the eight years the company spent developing the CD player, not once did the company have to commission a technical or market consultant to inform the executives on the decision to proceed with commercialization.

Professional unit variables:

6. forming or hiring new members
7. needs a broader perspective
8. needs brokering of concepts or outputs
9. needs members to improve their interpersonal relations and team-building -

It goes without saying that upon formation, the unit manager is the most likely candidate to discuss the assignments to be performed by the professional staff. Intervention of this kind is also called upon when hiring new members, although professional peers in like disciplines can assume some of this responsibility. More complex is the condition of "broader perspective," which can also be referred to as "vantage point." Most professionals become dedicated to the task at hand and occasionally lose sight of the overall goal. Unexpected events may crop up during the life of a project that the professional is in no position to fully evaluate. Managers in these instances may be sufficiently objective to sense when a new problem represents a fatal obstacle, when to call for additional research assistance, to search for new information or additional measurements, to seek a more advanced process, to hire a consultant, or to call for a progress review. The software engineering environment exemplifies this condition. Since software engineers operate in a culture of tight deadlines to begin with, many prefer to design while they program, even though they realize that this practice may jeopardize full specification. Yet, management depends on specification to insure that all of the components of a given system will mesh. It is, further, often a manager in charge of quality assurance who must assume responsibility to see that the program gets tested. Without adequate information, however, testing becomes very difficult. Hence, managers occasionally need to intervene in the software environment to insist upon the development of the proper methodology to integrate the components and produce a workable system.

The broader perspective called for may also entail encouraging professionals from different disciplines to form productive associations. Mounir Kamal, executive director of engineering sciences at the General

Motors Research Laboratories, discussed with me a number of such personal interventions. In one case, engine researchers and scientists trained in structural dynamics began to work together on a vibration problem related to the mechanics of the engine block. In another case, researchers in the separate disciplines of fluid and solid mechanics began to collaborate on a new project in hydrodynamic lubrication.

Occasionally, a unit manager or technically-oriented executive has the foresight to broker an idea being developed by the professional staff, but without applications. Many start-ups in biotechnology, for example, have developed application-rich technologies without the resources to market them into viable products. At Applied ImmuneSciences, Inc., researchers had developed a means of removing abnormal molecules and cells from blood as a novel approach for treating autoimmune and malignant disorders. However, it took their senior vice president of research and development, Thomas Okarma, to work out a joint venture with a biological manufacturer which could utilize their technology in treatment programs avoiding traditional drug therapy.

Finally, probably due to the success of the quality of work life movement and such applications as quality circles, no one seems to need convincing on the value of sound interpersonal relations and team-building. Although management education and development programs purport to teach these skills, not all managers are competent in them. Those that are, however, can assist professional groups where there are interpersonal or intergroup conflicts that need attention if the unit and the organization are to be productive.

Organization variable:

10. requires greater multidisciplinary efforts - Occasionally, executives need to intervene to encourage professional units to coordinate with one another. There are examples of companies which have done well running projects in parallel, or in virtual competition with one another, but in most instances, professional groups require more rather than less integration. Watts Humphrey¹⁸ reported on a hopeless disagreement which had broken out between an electronics team and a mechanical engineering group on a military project to design a secure voice communications system. The electronics team was charged with designing the circuits, and the mechanical engineering team a packaging structure that would withstand rugged army field conditions. Although it was essential that the teams work together, each was preoccupied with its own problems. The electronics team was trying to figure out the circuit design for the system while the mechanical engineers had to know the size and weight of the power supplies before they could start their work. The latter group needed sufficient lead time to order the specially fabricated structural members and

transformers required to meet the manufacturing schedule.

The project was going nowhere until the department manager finally decided to combine the two professional groups into a unified project. The new project leader selected quickly realized that the mechanical engineers could not possibly finish their work on time unless the electronics engineers made a reasonably accurate estimate of power consumption. The electronics team, however, was reluctant to make such an estimate until the circuit designs were completed. Nevertheless, the project leader ordered a complete power study and then added a contingency to take care of any changes. Although some later adjustments were needed, the estimate was close enough to permit the mechanical engineers to start work, and the project was finished close to its original schedule.

The management of autonomy may be the most essential skill in managing professionals in organizations. As this article has demonstrated, however, it is not a simple matter of letting the professional alone nor is it a matter of having the manager maintain constant oversight. Balance is required, and it is my hope that we have provided the proper weights to level the scales.

FOOTNOTES

1. See pp. 9-12 on the growth and erosion of professionalism in Joseph A. Raelin, The Salaried Professional: How to Make the Most of Your Career (Westport, CT: Greenwood/Praeger, 1984).
 2. Talcott Parsons discussed the conflicting expectations of professionals in his The Social System (New York: Free Press, 1951) but did not ultimately see significant incompatibility between the business and professional systems. Simon Marcson (The Scientist in American Industry, New York: Harper, 1960) and William Kornhauser (Scientists in Industry, Berkeley: University of California, 1962) were perhaps the first to cite actual conflict between the career and work objectives of professionals and the goals of the large bureaucratic organization. Robert Merton (Social Theory and Social Structure, Glencoe, IL: Free Press, 1957) and Alvin Gouldner ("Cosmopolitans and Locals: Toward an Analysis of Latent Social Roles," Administrative Science Quarterly, Vol. 2, 1957: 281-306 and Vol. 3, 1958: 444-480) were the first to point to particular problems with the most professionalized of professionals - those referred to as "cosmopolitan."
 3. Talcott Parsons, Structure and Process in Modern Societies (New York: The Free Press, 1960), pp. 59-69.
 4. Joseph A. Raelin, Calvin K. Sholl, and Daniel Leonard, "Why Professionals Turn Sour and What to Do," Personnel 62 (1985): 28-41.
 5. For some informed accounts on the problem of managing the transition from professional to manager, see James A. Bayton and Richard L. Chapman, "Making Managers of Scientists and Engineers," Research Management 16 (1973): 33-36; Yehouda A. Shenhav, "Abandoning the Research Bench," Work and Occupations 15 (1988): 5-23; and a special section devoted to training professionals to become managers in the October 1987 Training and Development Journal.
 6. L. R. Sayles and M. K. Chandler, Managing Large Systems (New York: Harper & Row, 1971), p. 209.
 7. The leading writers in the area of self-management are Henry Sims and Charles Manz who have produced at least a score of articles on the subject. See, for examples, Charles C. Manz and Henry P. Sims, "Leading
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Workers to Lead Themselves: The External Leadership of Self-Managing Work Teams," Administrative Science Quarterly 32 (1987): 106-128. Another important contributor to this literature is Peter K. Mills. See his "Self-Management: Its Control and Relationship to other Organizational Properties," Academy of Management Review 8 (1983): 445-453.

8. For an excellent discussion of self-supervision and peer control among professionals in professional service firms, see Peter K. Mills, James L. Hall, Joel K. Leidecker, and Newton Margulies, "Flexiform: A Model for Professional Service Organizations," Academy of Management Review 8 (1983): 118-131.

9. See, for example, Walter P. Christian and Gerald T. Hannah, Effective Management in Human Services (Englewood Cliffs, NJ: Prentice, Hall, 1983).

10. Paul Hersey and Kenneth Blanchard may have been the first to fully detail the expertise contingency in their notion of "readiness," defined as the extent to which an employee has the ability and willingness to accomplish a specific task. Under a high readiness level, the appropriate leadership style in their life-cycle theory is delegating. For more information, see their Management of Organizational Behavior - 5th edition (Englewood Cliffs, NJ: Prentice-Hall, 1988). The substitutes for leadership theory is most attributed to Steven Kerr and John Jermier in "Substitutes for Leadership: Their Meaning and Measurement," Organizational Behavior and Human Performance 22 (1978): 375-403.

11. Charles C. Manz, "Self-Leadership: Toward an Expanded Theory of Self-Influence Processes in Organizations," Academy of Management Review 11(1986): 585-600.

12. This process of broadening in law firms was noted in Edwin O. Smigel's well-known The Wall Street Lawyer (New York: The Free Press, 1965).

13. Besides the works cited in ft. 2, for more information on cosmopolitan scientists, readers may consult B. G. Glaser, "The Local-Cosmopolitan Scientist," American Journal of Sociology 69 (1963): 249-259; and Michael J. Stahl, Charles W. McNichols, and T. Roger Manley, "Cosmopolitan-Local Orientations as Predictors of Scientific Productivity, Organizational Productivity, and Job Satisfaction for Scientists and Engineers," IEEE

Transactions on Engineering Management EM-26 (1979): 39-43.

14. The concept of the organic (as opposed to the "mechanistic") organization is normally attributed to T. Burns and G. M. Stalker, The Management of Innovation (London: Tavistock, 1961).

15. Amitai Etzioni (ed.), The Semi-Professions and their Organization. Teachers, Nurses, Social Workers (New York: The Free Press, 1969).

16. The Coxe Group, Success Strategies for Design Professionals (New York: McGraw-Hill, 1987).

17. For a fascinating account on the professional use of nonexperts, see Sheldon Krinsky, "Epistemic Considerations on the Value of Folk Wisdom in Science and Tchnology," Policy Studies Review 3 (1984): 240-262.

18. Watts Humphrey, a former IBM executive, detailed this (non-IBM) case in his Managing for Innovation: Leading Technical People (Englewood Cliffs, NJ: Prentice Hall, 1987).

EXHIBIT 1

The Proposed Distribution of Autonomy Levels Among Managers and Professionals

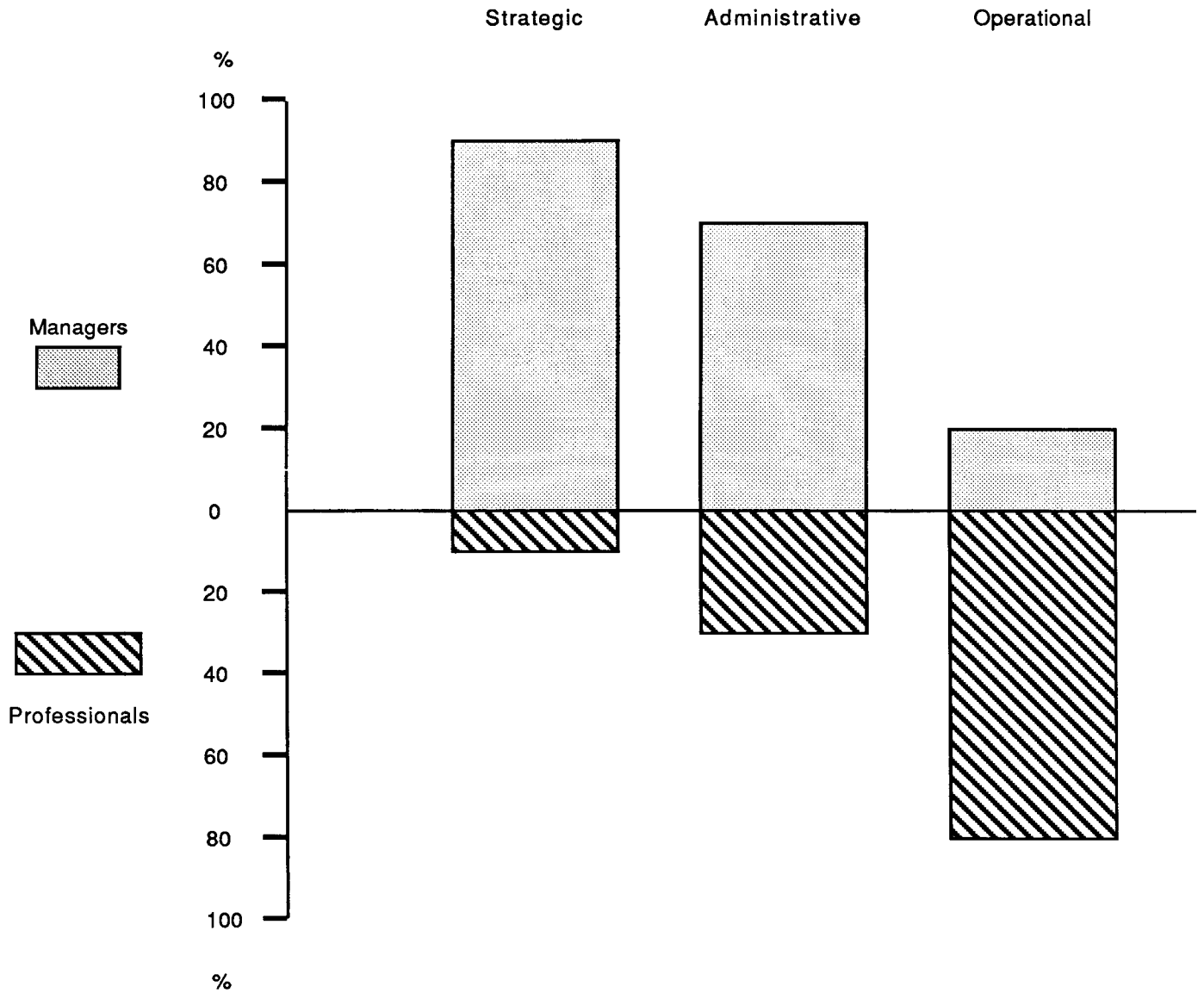


EXHIBIT II

The Conditions Under Which Professionals May Control Ends

- individual is high performer / proven contributor
 - individual is broad-based
 - individual is in responsible and critical position
 - individual is highly trained
 - individual shares organizational goals
-
- job entails client involvement
 - job is relatively high-level
-
- organizational unit is strategically vital or is involved in internal technology transfer
-
- organization itself is open, innovative, and growth-oriented
 - organization relies on professionals in its mission and mission is emerging
-

EXHIBIT III

The Conditions Under Which Managers May Control Means

- professionals are poor performers, demotivated, insecure, or new
 - professionals are overspecialized
 - professionals generally engage in many discretionary activities
 - the professionals' job is nearing a time limit
 - the professionals' tasks are not clear and the manager knows how to clarify them or introduce some relevant skills
 - the professional unit is forming or hiring new members
 - the professional unit needs a broader perspective
 - the professional unit's concepts or outputs need brokering
 - the professional unit's members need to improve their interpersonal relations and team-building
 - the organization requires greater multidisciplinary efforts
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BIOGRAPHY

JOSEPH A. RAELIN is professor of Administrative Sciences at the Boston College School of Management. His recent research focuses on the management of professionals, determining how to create organizational climates receptive to the mutual goals of managerial proficiency and professional accomplishment. His most recent book is: The Clash of Cultures: Managers and Professionals (Harvard Business School Press, 1986). He enjoys reading and contributing to AME, this being his third article since the inaugural issue.