

Developing Staffing Strategies That Work: Implementing Pragmatic, Nontraditional Approaches

Thomas P. Bechet

Most organizations understand the benefits that a longer term approach to staff planning can bring. Many actually attempt to develop staffing strategies (or strategic workforce plans, as they are also known). Unfortunately, these organizations often find that the “traditional” approaches to workforce planning that they try to use are ineffective, and expected benefits are not realized. The answer to this problem lies not in trying to implement the traditional approach more effectively, but in implementing a completely different kind of process for strategic staffing. This paper describes (and provides examples of) some of those “less traditional,” but more effective approaches.

The “Strategic Staffing” Process

First, let’s clarify our terms. I define “strategic staffing” as the process of identifying and addressing the staffing implications of business plans and strategies, or better still, as the process of identifying and addressing the staffing implications of change. The impact on staffing should be defined (or at least discussed) whenever changes to business plans are being considered (whether near-term or longer-term). Others call the process “strategic workforce planning,” but to me, “strategic staffing” emphasizes the longer term, business orientation of the process. By any name, this effort typically includes:

- Defining the number (staffing levels) and types (capabilities) of employees who will be needed at a particular point in the future to implement plans effectively (often including how that staff should be organized and deployed);
- Identifying the staffing resources that are currently available;
- Projecting the “supply” of talent that will be available at that point in the future for which requirements have been defined (e.g., factoring in the effects of turnover, retirements, planned movement, etc.);
- Identifying differences between anticipated demand and forecasted supply; and
- Developing and implementing staffing plans/actions needed to close talent gaps and eliminate surpluses.

These basic elements are, of course, quite typical of any strategic staffing or workforce planning process, and might be described in any text or suggested by

any consultant. Successful implementation of a strategic staffing process lies not in how these basic steps are defined. The “devil is in the details” — or perhaps more appropriately in this case — the devil is in the implementation. It is not the steps themselves that are important, it is how they are developed and implemented that counts.

Traditional Approaches Just Don't Work

Most organizations that attempt to implement a strategic staffing process follow a fairly traditional approach. Usually, these organizations include staff planning as a component of their annual business planning process. Often, these organizations request that managers define future staffing needs for each year of the planning period (usually in terms of headcount, not required capabilities) using a common template or “form.” The templates are at a common level of detail and are based on common planning parameters (e.g., all units define requirements at a job-specific level for each of the coming three years). Once completed, these templates are often combined or compiled at various levels to create overall pictures of needs (e.g., unit plans are “rolled up” to a divisional level, divisional plans are compiled to create a “firm-wide” view). Organizations then attempt to create meaningful staffing plans to address these needs. Some organizations supplement these staffing plans with a series of reports and listings (e.g., a list of openings and how they were filled, a summary of turnover rates over time for various types of employees). Unfortunately, rarely do these efforts result in specific staffing and development plans that are actually implemented. Managers tend to see limited value in the process and complain loudly about the work involved. Most managers are being measured and rewarded for achieving short-term objectives that may be inconsistent with the longer-term view that strategic staffing entails. Forecasts of needs are often “hockey stick” projections that are not realistic or grounded in business plans. Some managers in more volatile areas, where business is changing rapidly, question the validity and value of processes that ask them to provide estimates of staffing needs for points in time that are well beyond their ability (or need) to plan. Staff planning is often incomplete — required staffing levels may be forecast, but required capabilities are not.

The staffing plans that result from traditional processes such as these often provide little valuable information and are rarely used to drive staffing decisions. Estimates of need are imprecise and inaccurate.

In many cases, the output from the process is too high-level and generic to drive recruiting plans, especially once they have been rolled up to create that firm-wide view. Since required capabilities are not usually defined specifically, it is difficult (if not impossible) to create action-oriented development plans for individuals that address anticipated capability shortages. Some organizations do not even create staffing plans, opting instead to focus their workforce planning efforts almost solely on reporting and compiling staffing information from the past (e.g., detailed turnover studies and descriptions of recent staffing actions), rather than planning to meet future needs. In the end, there has been much work

completed, but few results seen. The strategic staffing process then becomes solely staff driven, or worse yet, disappears completely.

More Effective Approaches to Strategic Staffing

Often, implementing different, more pragmatic approaches to strategic staffing can yield the high-quality results that organizations need and expect. Start by defining an entirely different objective for the process itself. The objective is to build a context for decision making, not to predict the future. Don't try to predict future staffing needs with certainty or define actions to be taken now to eliminate problems that may or may not occur in the future. At best, that is difficult to do well (and accurately) and may be viewed by managers as something that is "nice to have" but not absolutely necessary. Instead, consider a staffing strategy as a longer-term context within which more effective near term staffing decisions can be made.

Not only is this a more realistic objective for the process, but its shorter-term focus might just capture the attention of those line managers who are being measured by, and rewarded for, achieving near-term objectives. Because it helps define appropriate short-term actions, it is more likely that the same line manager making the staffing decision will still be in place to reap the benefits of that decision later on.

Here is a simple example of how this objective works in practice. Suppose an organization has documented that it will need 25 additional project managers by the end of its fiscal year. How would a need like this be met? Positions could be filled through hiring, redeployment, promotion, work reassignment, use of contract/contingency staff, or many other sources. Which option is most effective? To select the right option, that organization must have a sense of its future needs. If those project managers are needed in the future (i.e., beyond this fiscal year), a more permanent solution is most effective (e.g., hiring or promotion). If, on the other hand, the need is a "blip" in the curve or the result of some project scheduling irregularities, a more temporary solution is better. For example, the company might hire contractors or delay new projects until the first quarter of the next year, so that existing project managers can be redeployed to those jobs, and an unneeded surplus of talent is not created in the future. In any of these instances, the "best" near-term solution can only be determined after the longer-term context has been defined.

When searching for ways to improve (or initiate) the strategic staffing process, consider the following options to traditional approaches.

- **Address staffing from a proactive, planning perspective, not just an implementation concern.** It is no longer appropriate to consider staffing solely from an implementation perspective. Even though it may have been acceptable practice in the past, it is no longer realistic for business to

assume that the staff needed to implement its plans is readily available and quickly recruited, developed and deployed. In fact, staffing constraints (e.g., an inability to recruit a sufficient number of individuals with critical skills) may impact the company's ability to implement its plans. These constraints should be identified and addressed as part of the planning process, not left as surprises to be uncovered when implementation begins. From a more positive perspective, a company may choose to move in a different direction (or try to capitalize on a market opportunity) specifically because of the staffing levels and capabilities it has at its disposal.

Here is an example. In order to take advantage of population growth and shift, an HMO planned to expand into a new geographic region of the state it served. The marketing and medical economics functions determined that four new medical centers needed to be built, if the member needs and potential of this new market were to be met effectively and efficiently. The decision was made to construct the new centers simultaneously in order to enter this market quickly. Unfortunately, the HMO lacked a sufficient number of physicians and medical technicians to staff four new centers all at once—at least without having a catastrophic impact on its existing facilities. As a result, newly constructed medical centers went unused (some for many months), until sufficient staff could be secured. Obviously, it was quite costly to maintain the unused facilities. A review of available staffing before the construction decision was made would have shown that a sequential (not simultaneous) opening of centers was more cost effective.

- **Focus on issues, not organizations.** Many organizations feel that, because staffing strategies are beneficial in some areas, they should be completed for the organization as a whole — that plans should be created for every unit, regardless of its situation. This type of process usually proves to be both ineffective and inefficient, because not every unit merits the detailed analysis that is typically needed to create and implement an effective staffing strategy.

Instead of creating models or analyses for every unit, focus only on those areas where strategies are really needed. Create a series of staffing strategies that each address particular issues. For example, build a staffing strategy that focuses solely on positions that are critical to business success. Create a strategy for a series of positions that are hard to fill or for which external competition for talent is great. Focus a strategy on a unit that will experience significant change. Will the organization need to tap new, nontraditional sources for key talent? If so, create a strategy that is concentrated on those jobs. This approach will allow you to focus your planning resources where they will have the most advantageous effect. Here is an example of this focus. Two insurance companies were

merging. Obviously, mergers can create a host of staffing issues, some more critical than others. Instead of creating a generic strategy that applied to many units, the company chose to focus initially on claims. The claims functions of the two companies were managed and staffed quite differently. One company was organized by function (e.g., disbursement), the other by impairment category (e.g., long-term disability). In addition, one company had a 40-hour work week, and the second had a 37.5-hour week. A longer-term, succinct, focused staffing plan was developed to integrate the two claims work forces and define the implications of changes in work week length. Other (separate) strategies were developed to address other implications of the merger.

In some cases, staffing strategies that span organizational boundaries are still needed. Cross-unit staffing strategies should be developed whenever an organization intends to manage key talent across organization lines (e.g., managing IT or entry-level engineering talent from a “corporate” perspective). An “issue orientation” can still be maintained in these cases. When creating such strategies, include in the analysis only those positions that are to be managed from a broader perspective. Here are two examples:

- An HMO was implementing a new, nationwide data collection and analysis system that would support all of its regions (some of which had their own such systems). Still, it had to maintain its legacy systems while implementing the new system. This raised numerous staffing issues. New talent (with new IT skills) had to be sourced to support the development of the new system, moreover critical talent had to be retained to keep old systems functioning in the meantime. Yet the organization did not want to simply hire/contract the new talent, for then the skills of its existing talent would become obsolete. It only made sense to address these critical issues from a nationwide, cross-region perspective. The HMO developed a staffing strategy that focused on the critical IT skills needed to support the transition—but only on the positions that required these specific skills. Other plans (some strategic, some tactical) were developed for other positions.
- To increase its staffing flexibility, the department of transportation of a state government was considering combining several separate classes of workers (each of which was focused on a particular set of skills) into a single category of “transportation worker” that included individuals with multiple skills. A staffing strategy was developed to define the effects that this change would have on classification, scheduling/deployment, and training. The plan that was developed included transportation workers in all districts (since bargaining unit considerations meant that the change could

only be implemented on a statewide basis), but focused mainly on the positions that were affected. Finally, don't attempt to solve a second issue or problem until you have created (or at least are well on your way to creating) staffing strategies that fully address the first!

- **Tailor the process for each issue.** Traditionally, each unit is asked to provide the same information regarding staffing, using a common template, at the same time each year, for the same planning period/time frame. While this approach may bring consistency to the approach, it also forces every unit to adopt a process and set of planning parameters that may not be appropriate. Rather than creating a one-size-fits-all process that applies everywhere, vary planning parameters (e.g., the population to be included, the planning horizon, and the structure of the model itself), so that they are appropriate for each issue being addressed. Here is an example of tailoring. An engineering/construction firm created a "long-term" staffing plan for its IT unit that covered but a single year. Given the rapid pace of change of technology (and that so little was known about the future of that technology), it was difficult to define needs (whether in terms of capabilities or staffing levels) past that one-year point. Consequently, it made no sense to develop staffing plans for IT beyond that one-year planning horizon (even though the organization had a five-year business plan). That same organization also found it necessary to increase the depth and breadth of its management pool. Given the rate of change for the business as a whole (and the time needed to implement any significant changes in management talent), a three-to-five-year staffing and development plan was developed.

A "common" process would probably force the IT function and management teams to use the same time frame, and this would most probably result in an ineffective plan. Would it be appropriate to ask IT to create staffing plans for years two and three, even though managers knew that this information would not be useful and would not be applied? Alternatively, would it have been better to ask each unit to plan management needs for just the one-year time frame, even though it would take several years to address the depth and breadth issues that were identified? Would it have been possible to compromise and have each group do a two-year plan (which is probably ineffective for both)? In this case (and many others like it), it only makes sense to vary the planning horizon. Obviously, this tailoring of parameters is only viable when separate staffing plans are defined by issue. The typical one-size-fits-all approach doesn't allow such variation.

- **Focus on particular positions, not all positions.** Some organizations attempt to develop staffing strategies that include all jobs. Not every job even needs to be addressed from a strategic perspective. For example, it is rarely necessary to develop a long-term staffing strategy for a job that can be filled relatively quickly from known internal sources or relatively abundant external pools. In addition, the development of effective staffing strategies requires much work and significant resources, so it is not usually realistic to include each and every position in the analysis. Including all jobs (even those for which a strategic perspective is not required) simply bogs down the process, rendering it even more inefficient. Instead, the process should focus on only two types of positions or situations. Consider building staffing strategies only for positions where:

- **The organization needs to be proactive.** A longer-term perspective is usually required when an organization is trying to be proactive in meeting staffing needs (e.g., staffing and training a customer service unit, so that it is fully functional before a new product is launched). Which jobs will be staffed just before launch? Which will be filled a month or two before launch in order to build continuity and teamwork? Which senior management/leadership positions should be filled a year in advance to set direction and strategy?
- **The organization needs time to respond.** Strategic perspective is needed when an organization determines that their staffing needs are best met in ways that require some advance preparation (e.g., cases where new sources of talent must be identified; as normal channels become less productive; or instances where talent needs will be met through longer-term development, not short-term hiring). If a future need is to be filled from within, what development needs must be addressed before such a move can be made? What plans for development should be created and implemented so that such moves will be realistic and successful? If you are to develop new relationships with alternative sources of talent (e.g., new schools or search firms), it will take time to identify and develop possible partnerships with such sources.

Long-term staffing strategies may not need to be created for any other type of position—and certainly need not be developed for all positions, regardless of need.

Here are two examples, one proactive and one responsive:

- **Being proactive:** After conducting a scan, an oil company discovered that it was particularly vulnerable, from a recruiting

and staffing perspective, in the area of geo-science. Competition for graduate geologists and geophysicists was intensifying, and the company was expecting that it would be unable to attract the number of recruits it thought it needed. Given the criticality of this need, the company wanted to be proactive. It decided to develop contacts and relationships with graduate students well before they entered the job market (e.g., through presentations and internships), so that ties might be developed which would increase the possibility that they would work for the company upon graduation. The company created a model and staffing strategy that focused solely on these “hard to fill” categories.

- **Needing time to respond:** In an insurance company, the traditional “career path” to branch manager passed through the underwriting function. Most branch managers began as trainees, became underwriters, were then designated “managers in training,” and were subsequently named branch managers, usually in smaller offices. This process might take eight to ten years. Openings for branch managers in larger offices usually were filled by promoting managers from smaller offices. Rapid business expansion meant that a large number of new branch offices would be opened. The traditional career path could simply not provide a sufficient number of qualified candidates. Because of the length of time required to move along that path, the company was forced to find alternate sources for branch manager candidates. The organization developed a staffing strategy that helped it to define the appropriate mix of targeted recruiting and accelerated development that was needed to meet its growing needs for management talent.
- **Keep plans separate, not consolidated.** In many cases, organizations prepare staffing plans at a unit level that are then “rolled up” into some kind of consolidated plan (or to display the results “on one sheet of paper”). The common templates that are often used to gather staffing data are designed to facilitate just this type of consolidation.

This process of consolidation actually squeezes out the very detail that is most useful and some-times masks significant differences. If one unit has 20 software engineers too many and another unit has 20 too few, consolidation of staffing plans would show that there is no problem (i.e., the surplus of 20 and the gap of 20 would cancel out, implying that no issues needed to be addressed). In fact (assuming

the units are not co-located), there may be 40 issues to address (i.e., reducing 20 gaps and alleviating 20 surpluses).

It is also difficult (and sometimes actually impossible) to develop specific, actionable staffing plans to address summarized needs. The plans might vary greatly depending on circumstances and situations. For example, a consolidated staffing plan might describe an overall need for 15 “technical specialists.” The staffing actions required to fill 15 openings in one unit/location would probably be completely different from those needed to fill a single opening in each of 15 different units/locations. The actions needed to fill 15 positions of the same type of specialist would be quite different from those needed to fill 15 different types. Similarly, it would be difficult (and perhaps even impossible) to define recruiting plans based on a strategy that consolidates various engineering specialties into a single category. It is unlikely that the differences needed to create realistic, focused staffing plans could be discerned or inferred from summarized or compiled data.

When creating staffing strategies, keep the plans separate and distinct. This is especially true if you have developed plans to address separate issues, using different planning parameters. Create plans that are at the same level as your probable solution. Don’t roll up data as a matter of course. Create a corporate view only if the staffing issues that can be identified and addressed are at a corporate level. If, in certain cases, an integrated plan is required (e.g., to manage IT across, and not within, organizational units), create a “stand-alone” model that spans those units but includes only those jobs.

When it comes time to summarize (and develop that one sheet overview), create a page that high-lights the most critical staffing issues you have defined (see above) and summarizes the strategies you plan to implement to address those issues. If more detail is required, make specific plans available as an attachment.

- **Define issues on an ongoing basis, don’t create an “event.”**
Strategic staffing should be thought of as defining and addressing the staffing implications of change. Thus, staffing implications need to be defined, whenever change is being discussed or anticipated. If your organization discusses and considers changes to its business plans and strategies just once each year, then an annual staffing process may be appropriate. If your organization discusses, considers, and implements changes throughout the year, however, an annual process is probably insufficient. A discussion of the staffing implications of changes in business plans should be conducted each and every time change is

discussed or anticipated — not at some set time each planning period. Assuming change is constant, this implies that strategic staffing is an ongoing process, implemented and updated throughout the year—not a once-a-year event.

As an example, an engineering /construction company used to have an annual staff planning process, but now discusses staffing implications of change at every management committee meeting (i.e., on a biweekly basis). Further, it developed a performance expectation for managers that any proposal for resources (e.g., a new project or a change in technology used) had to include a analysis of staffing issues and a high-level staffing plan.

- **Focus on planning and acting, not reporting.** Many organizations spend too much time creating reports, tables and listings that describe in detail past turnover, current staffing levels, and other staffing related data. Others document staffing movement (e.g., identifying openings and detailing how each was filled). In some cases, these reports represent the bulk of the HR planning effort. What good is this data if it does not significantly affect decision making?

An old adage describes a significant difference between “data” and “information.” Data is just that — facts, figures, numbers, and the like. Data that is used to make a decision is information. If, for example, you reallocate staff because of something you discern from a data table, then that data has become information. When it comes to staffing, make sure that you provide managers with information, not data. If your reports provide managers with data that is simply “nice to know” or “interesting,” but doesn’t directly influence decision making, don’t provide them.

Information on past practices and results is typically useful only when it is used as a basis for formulating assumptions about the future that can be incorporated into plans. For example, studies of past turnover should be conducted only when turnover assumptions are to be factored into future plans and models. Detailed information on employee movement might identify alternative career paths that can be exploited to fill staffing shortages that the model has identified, but should not be used to estimate the number of moves of various kinds that are expected in the future.

Here are two examples:

- One high-tech company used to regularly publish a detailed listing that addressed staffing activity. The report (often more than 100 computer-generated pages in length) identified existing openings and detailed how long each position had been open, what had been

done in the last month to fill openings, and any data on how the position would be filled. The report did not include any “look forward” and was not viewed by managers as an especially useful tool. Once the organization began to look at staffing from a more strategic perspective, the report was streamlined, so that it provided information on possible sources of needed talent.

- An automotive company was trying to establish a strategic workforce planning function. It elected to build its foundation on providing information — accurately answering the questions of managers regarding past staffing practices and patterns (e.g., defining annual turnover rates for specific categories of jobs in response to specific management requests). As the function built credibility, the workforce planning unit was planning to “add value” by discussing with managers why they were requesting the data, suggesting alternative data, conducting analyses, and interpreting results. By asking these intelligent questions, the function hoped to build a reputation as a valued strategic partner, thus allowing it to participate actively in the business planning process.
- **Solve problems, don’t just build capability.** Managers want answers to their staffing problems, and solutions to their issues. Yet some HR functions focus their efforts on providing a process, system, or tool that managers can use to develop staffing strategies — not on meeting management’s need for action and answers. The best “deliverable” of the strategic staffing process isn’t a tool or model — it is a solution to a staffing problem (i.e., a qualified individual filling an opening).

Generally, the development of a “tool” or “model,” while necessary in many cases, is by itself insufficient. The tool must be applied effectively to identify and address critical staffing issues. Managers must be trained (perhaps by HR staff) to use the tools effectively and apply results analytically. Make sure your process results in specific, actionable staffing plans (i.e., what will be done to address staffing short-ages and surpluses), not just a better definition of the needs themselves.

- **Do the most you can with the information you have.** Many organizations think that they lack sufficient data to support the development of a staffing strategy. When trying to define staffing requirements, for example, some organizations seem to think that staffing strategies must be based on “perfect data” — a full set of accurate information that describes fairly precisely what each business unit will do or is trying to accomplish. It is as if the staffing function is saying to the units, “As soon as you figure out what we are going to do, we will be able to define staffing requirements.” Given the rate of change in most organizations, this well defined, complete data set will simply

never be available. Still, valuable staffing strategies can be developed, even when “full” data is not available.

- **Fully utilize the data that does exist.** The objective in these cases is not to try and get that data, but instead to “do the most you can with what you have.” You almost always know more than you think you do. Suppose you are “sure” of 20 percent of what your organization is going to accomplish. This will allow you to create staffing strategies for that 20 percent. You can either create a strategy for the part you know, or do nothing until you know it all. The choice is clear. Don’t think in terms of the missing 80 percent — think instead that you will be better off addressing at least some of the problem than if you did nothing at all. Here is an example of what one medical center did to create a staffing strategy for patient care staff in the face of great uncertainty. The center could calculate a ratio of the number of nurses required per patient in a given unit. That was not the problem. The problem was that the center had very little idea of how many patients could be expected at any given time. While not random, the number of patients in each unit fluctuated greatly. Consequently, there was no clear number of patients to whom this staffing ratio could be applied. Even in the face of such uncertainty, the center created a very specific staffing strategy. It would use its own full-time staff to support the minimum number of patients (this number would, by definition, be the same every day); supplement this “base” with its own part-time staff, whenever the number of patients was more than the minimum and less than the median; and use contractors above the median.
- **Scenario Planning:** Some organizations incorporate various scenarios into their business plans. Probably, each scenario has different staffing implications. One approach would be to try to determine which scenario will occur, and then define staffing plans for that scenario. Not only is this difficult to do, but there could be significant problems, if you staff for one scenario and another occurs. Instead, define the staffing requirements of each of the most likely scenarios and look for commonality. For example, suppose that there are three possible scenarios for expansion of a business unit. In case one, 40 new sales associates will be needed. In the second, 50 will be needed. The third calls for “mega” growth, and 100 new sales associates would be required. Rather than choosing one scenario, create a strategy for attracting the minimum number of associates. No matter what happens, you are likely to need at least 40 sales associates. Obtaining these people will not solve all your problems, but you will certainly be better off than scrambling to hire the “right” number on short notice, once the actual scenario is determined.

- **“What If ” Planning:** Some plans are even less certain than the scenarios described above. In these cases, organizations discuss possible plans, but implementation remains uncertain. It makes no sense to try to “staff up” for each possibility, but still some staff planning can be beneficial. In these instances, define the staffing implications of the various alternatives (e.g., “If we were to do that, we would need 200 network administrators”), and discuss what would need to be done to attract these people. What skills would be required? How many people with those skills are out there? How many could we attract? At what rate of pay? Where would we look? Obviously you are not going to go out and hire these people at this stage, but discussing and developing the various alternatives will make it easier (and faster) to act later on — once those business plans become clearer.

Summary

If your organization understands the benefits of creating a staffing strategy, but has had little or no success to date implementing a traditional process, consider the alternatives described above. Think of strategic staffing as creating a longer-term context within which more effective short-term staffing decisions can be made. Integrate staffing into business planning, don't think of it solely in terms of implementation. Create strategies that focus on particular issues. Vary planning parameters accordingly. Include only those jobs for which a longer-term perspective is really needed. Keep plans separate and distinct. Update staffing plans, whenever significant changes in business plans are being considered. Work to provide managers with information, not data. And most important of all, develop strategies so that staffing issues and problems are solved—don't just build a new tool or system.

Figure 1. CONSIDER NEW APPROACHES

Instead of this	consider this
Predicting the future	Build a longer- term context for short-term decision making
Addressing staffing as an implementation concern	Address staffing from a proactive, Planning perspective
Focusing on organizations and units	Focus on issues
Defining a one-size-fits-all process	Tailor the process and parameters for each issue
Including all positions	Focus on positions where you need to be proactive or need time to react
Consolidating plans	Keep plans detailed, separate, and distinct
Creating plans as a one time “event” (e.g., annually)	Create plans in response to changing strategies, whenever change occurs or is discussed
Creating reports and listings that describe “what was”	Focus on planning and looking ahead to “what will be”
Building capability or tools	Solve staffing problems and address staffing issues

Author

Thomas P. Bechet

The Walker Group

2131 E. Broadway Rd., Suite 24

Tempe, AZ 85282-1737

www.thewalkergroup.com

Thomas Bechet is a Partner of The Walker Group and specializes in human resource strategies, strategic staffing, forecasting, executive succession and development planning, and human resource information management. He has provided consulting services to a variety of corporations and has also consulted with the states of Minnesota and Indiana. Tom has worked with domestic and international organizations to create human resource plans, including the identification of human resource issues, the development of human resource strategies, and the development of human resource planning processes. Many of these assignments included working directly with senior managers to define future position requirements and competencies, identify and assess potential candidates, and create action-oriented development plans. Tom has worked with organizations to develop strategies for managing human resource information and to improve the effectiveness of their human resource information systems. He has also assisted many organizations to design, develop and implement PC- and network-based systems to support forecasting, executive development, and