Every talent management process
in use today was developed half a
century ago. It's time for a new model.

by Peter Cappelli

Talent Management
for the
Twenty-First Century

FAILURES IN TALENT MANAGEMENT are an Ongoing
source of pain for executives in modern organizations.
Over the past generation, talent management practices,
especially in the United States, have by and large been
dysfunctional, leading corporations to lurch from surpluses
of talent to shortfalls to surpluses and back again.

At its heart, talent management is simply a matter of anticipat-
ing the need for human capital and then setting out a plan to
meet it. Current responses to this challenge largely fall into two

distinct - and equally ineffective - camps. The first, and by far the most common, is to do nothing: anticipate no needs at all; make no plans for addressing them (rendering the term "talent management" meaningless). This reactive approach relies overwhelmingly on outside hiring and has faltered now that the surplus of management talent has eroded. The second, common only among large, older companies, relies on complex and bureaucratic models from the 1950s for forecasting and succession planning - legacy systems that grew up In an era when business was highly predictable and that fail now because they are inaccurate and costly in a more volatile environment.

It's time for a fundamentally'new approach to talent management that takes into account the great uncertainty businesses face today. Fortunately, companies already have such a model, one that has been well honed over decades to anticipate and meet demand in uncertain environments - supply chain management. By borrowing lessons from operations and supply chain research, firms can forge a new model of talent management better suited to today's realities. Before getting into the details, let's look at the context in which talent management has evolved over the past few decades and its current state.

How We Got Here

Internal development was the norm back in the 19505, and every management development practice that seems novel today was commonplace in those years - from executive coaching to 36o-degree feedback to job rotation to high-potential programs.

Except at a few very large firms, internal talent development collapsed in the 1970s because it could not address the increasing uncertainties of the marketplace. Business forecasting had failed to predict the economic downturn in that decade, and talent pipelines continued to churn under outdated assumptions of growth. The excess supply of managers, combined with no-layoff policies for white-collar workers, fed corporate bloat. The steep recession of the early 19805 then led to white-collar layoffs and the demise of lifetime employment, as restructuring cut layers of hierarchy and eliminated many practices and staffs that developed talent. After all, if the priority was to cut positions, particularly in middle management, why maintain the programs designed to fill the ranks?

The older companies like PepsiCo and GE that still invested in development became known as "academy companies": breeding grounds for talent simply by maintaining some of the practices that nearly all corporations had followed in the past. A number of such companies managed to ride out the restructurings of the 19805 with their programs intact only to succumb to cost-cutting pressures later on.

The problems faced by Unilever's Indian operations after 2000 are a case in point. Known as a model employer and talent developer since the 19505, the organization suddenly found itself top-heavy and stuck when business declined after the 2001 recession. Its well-oiled pipeline saddled the company with 1,400 well-trained managers in 2004, up 27% from 2000, despite the fact that the demand for managers had fallen. Unilever's implicit promise to avoid layoffs meant the company had to find places for them in its other international operations or buy them out.

The alternative to traditional development, outside hiring, worked like a charm through the early 1990s, in large measure because organizations were drawing on the big pool of laid-off talent. As the economy continued to grow, however, companies increasingly recruited talent away from their competitors, creating retention problems. Watching the fruits of their labors walk out the door, employers backed even further away from investments in development. I remember a conversation with a CEO in the medical device industry about a management development program proposed by his head of human resources. The CEO dismissed the proposal by saying, "Why should we develop people when our competitors are willing to do it for us?" By the mid-1990s, virtually every major corporation asserted the goal of getting better at recruiting talent away from competitors while also getting better at retaining its own talent - a hopeful dream at the individual level, an impossibility in the aggregate.

Outside hiring hit its inevitable limit by the end of the 1990s, after the longest economic expansion in U.S. history absorbed the supply of available talent. Companies found they were attracting experienced candidates and losing experienced employees to competitors at the same rate. Outside searches became increasingly expensive, particularly when they involved headhunters, and the newcomers blocked prospects for internal promotions, aggravating retention problems. The challenge of attracting and retaining the right people went to the very top of the list of executives' business concerns, where it remains today.

The good news is that most companies are facing the challenge with a pretty clean slate: Little in the way of talent management is actually going on in them. One recent study, for example, reports that two-thirds of U.S. employers are doing no workforce planning of any kind. The bad news is that the advice companies are getting is to return to the practices of the 19505 and create long-term succession plans that attempt to map out careers years into the future - even

Peter Cappelli (cappelli@wharton.upenn.edu) is the George W. Taylor Professor of Management and the director of the Center for Human Resources at the University of Pennsylvania's Wharton School in Philadelphia. He is the author of several HBR articles and the book *Talent on Demand,* forthcoming from Harvard Business School Press, which further develops the ideas presented in this article.

though the stable business environment and talent pipelines in which such practices were born no longer exist.

That simply won't work. Traditional approaches to succession planning assume a multiyear development process, yet during that period, strategies, org charts, and management teams will certainly change, and the groomed successors may well leave anyway. When an important vacancy occurs, it's

What I am proposing is something akin to just-in-time manufacturing for the development realm: a talent-on-demand framework.

not unusual for companies to conclude that the candidates identified by the succession plan no longer meet the needs of the job, and they look outside. Such an outcome is worse in several ways than having no plan. First, the candidates feel betrayed - succession plans create an implicit promise. Second, investments in developing these candidates are essentially wasted. Third, most companies now have to update their succession plans every year as jobs change and individuals leave, wasting tremendous amounts of time and energy. As a practical matter, how useful is a "plan" if it has to be changed every year?

Talent management is not an end in itself. It is not about developing employees or creating succession plans, nor is it about achieving specific turnover rates or any other tactical outcome. It exists to support the organization's overall objectives, which in business essentially amount to making money. Making money requires an understanding of the costs as well as the benefits associated with talent management choices. The costs inherent to the organization-man development model were largely irrelevant in the 1950s because, in an era of lifetime employment and a culture in which job-hopping was considered a sign of failure, companies that did not develop talent in-house would not have any at all. Development practices, such as rotational job assignments, were so deeply embedded that their costs were rarely questioned (though internal accounting systems were so poor that it would have been difficult to assess the costs in any case).

That's no longer true. Today's rapid-fire changes in customers' demands and competitors' offerings, executive turnover that can easily run to 10%, and increased pressure to show a financial return for every set of business practices make the develop-from-within approach too slow and risky. And yet the hire-from-without models are too expensive and disruptive to the organization.

A New Way to Think About Talent Management

Unlike talent development, models of supply chain management have improved radically since the 1950s. No longer do companies own huge warehouses where they stockpile the components needed to assemble years' worth of products they can sell with confidence because competition is muted and demand eminently predictable. Since the 1980s, companies have instituted, and continually refined, just-in-time manufacturing processes and other supply chain innovations that allow them fb anticipate shifts in demand and adapt products ever more accurately and quickly. What I am proposing is something akin to just-in-time manufacturing for the development realm: a talent-on-demand framework. If you consider for a moment, you will see how suited this model might be to talent development.

Forecasting product demand is comparable to forecasting talent needs; estimating the cheapest and fastest ways to manufacture products is the equivalent of cost-effectively developing talent; outsourcing certain aspects of manufacturing processes is like hiring outside; ensuring timely delivery relates to planning for succession events. The issues and challenges in managing an internal talent pipeline - how employees advance through development jobs and experiences - are remarkably similar to how products move through a supply chain: reducing bottlenecks that block advancement, speeding up processing time, improving forecasts to avoid mismatches.

The most innovative approaches to managing talent use four particular principles drawn from operations and supply chain management. Two of them address uncertainty on the demand side: how to balance make-versus-buy decisions and how to reduce the risks in forecasting the demand for talent. The other two address uncertainty on the supply side: how to improve the return on investment in development efforts and how to protect that investment by generating internal opportunities that encourage newly trained managers to stick with the firm.

PRINCIPLE 1 Make *and* Buy to Manage Risk

Just as a lack of parts was the major concern of midcentury manufacturers, a shortfall of talent was the greatest concern of traditional management development systems of the 1950s and 1960s, when all leaders had to be homegrown. If a company did not produce enough skilled project managers, it had to push inexperienced people into new roles or give up on projects and forgo their revenue. Though forecasting

was easier than it is today, it wasn't perfect, so the only way to avoid a shortfall was to deliberately overshoot talent demand projections. If the process produced an excess of talent, it was relatively easy to park people on a bench, just as one might put spare parts in a warehouse, until opportunities became available. It may sound absurd to suggest that an organization would maintain the equivalent of a human-capital supply closet, but that was extremely common in the organization-man period.

Today, a deep bench of talent has become expensive inventory. What's more, it's inventory that can walk out the door. Ambitious executives don't want to, and don't have to, sit on the bench. Worse, studies by the consulting firm Watson Wyatt show that people who have recently received training are the most likely to decamp, as they leave for opportunities to make better use of those new skills.

It still makes sense to develop talent internally where we can because it is cheaper and less disruptive. But outside hiring can be faster and more responsive. So an optimal approach would be to use a combination of the two. The challenge is to figure out how much of each to use.

To begin, we should give up on the idea that we can predict talent demand with certainty and instead own up to the fact that our forecasts, especially the long-range ones, will almost never be perfect. With the error rate on a one-year forecast of demand for an individual product hovering around 33%, and with nonstop organizational restructurings and changes in corporate strategy, the idea that we can accurately predict talent demand for an entire company several years out is a myth. Leading corporations like Capital One and Dow Chemical have abandoned long-term talent forecasts and moved toward short-term simulations: Operating executives give talent planners their best guess as to what business demands will be over the next few years; the planners use sophisticated simulation software to tell them what that will require in terms of new talent. Then they repeat the process with different assumptions to get a sense of how robust the talent predictions are. The executives often decide to adjust their business plans if the associated talent requirements are too great.

Operations managers know that an integral part of managing demand uncertainty is understanding the costs

Operations Principles Applied to Talent Management

A supply chain perspective on talent management relies on four principles, two that address the risks in estimating demand and two that address the uncertainty of supply.

PRINCIPLE 1
Make *and* Buy to Manage Risk

A deep bench of talent is expensive, so companies should undershoot their estimates of what will be needed and plan to hire from outside to make up for any shortfall. Some positions may be easier to fill from outside than others, so firms should be thoughtful about where they put precious resources in development: Talent management is an investment, not an entitlement.

PRINCIPLE 2
Adapt to the Uncertainty in Talent Demand

Uncertainty in demand is a given, and smart companies find ways to adapt to it. One approach is to break up development programs into shorter units: Rather than put management trainees through a three-year functional program, for instance, bring employees from all the functions together in an 18-month course that teaches general management skills, and then send them back to their functions to specialize. Another option is to create an organization-wide talent pool that can be allocated among business units as the need arises.

PRINCIPLE 3
Improve the Return on Investment in Developing Employees

One way to improve the payoff is to get employees to share in the costs of development. That might mean asking them to take on additional stretch assignments on a volunteer basis. Another approach is to maintain relationships with former employees in the hope that they may return someday, bringing back your investment in their skills.

PRINCIPLE 4
Preserve the Investment by Balancing Employee-Employer Interests

Arguably, the main reason good employees leave an organization is that they find better opportunities elsewhere. This makes talent development a perishable commodity. The key to preserving your investment in development efforts as long as possible is to balance the interests of employees and employer by having them share in advancement decisions.

involved in over- or underestimation. But what are the costs of developing too much talent versus too little? Traditionally, workforce planners have implicitly assumed that both the costs and the risks even out: that is, if we forecast we'll need 100 computer programmers in our division next year and we end up with to too many or 10 too few, the downsides are the same either way.

In practice, however, that's rarely the case. And, contrary to the situation in the 1950s, the risks of overshooting are greater than those of undershooting, now that workers can leave so easily. If we undershoot, we can always hire on the outside market to make up the difference. The cost per hire will be greater, and so will the uncertainty about employees' abilities, but those costs pale in comparison to retention costs. So, given that the big costs are from overshooting, we will want to develop fewer than 100 programmers and expect to fall somewhat short, hiring on the outside market to make up the difference. If we think our estimate of 100 is reasonably accurate, then perhaps we will want to develop only 90 intern ally Just to make sure we don't overshoot actual demand, and then plan to hire about 10. If we think our estimate is closer to a guess, we will want to develop fewer, say 60 or so, and plan on hiring the rest outside.

Assessing the trade-offs between making and buying include an educated estimation of the following:

• How long will you need the talent? The longer the talent is needed, the easier it is to make investments in internal development pay off.

. How accurate is your forecast of the length of time you will need the talent? The less certainty about the forecast, the greater the risk and cost of internal development - and the greater the appeal of outside hires.

• Is there a hierarchy of skills and jobs that can make it possible for candidates who do not have the requisite competencies to learn them on the job, without resorting to specialized development roles or other costly investments? This is particularly likely in functional areas. The more it is so, the easier it will be to develop talent internally.

• How important is it to maintain the organization's current culture? Especially at the senior level, outside hires introduce different norms and values, changing the culture. If it is important to change the culture, then outside hiring will do that, though sometimes in unpredictable ways.

The answers to these questions may very well be different for different functional areas and jobs within the same company. For instance, lower-level jobs may be easily and cheaply filled by outsiders because the required competencies are readily available, making the costs of undershooting demand relatively modest. For more highly skilled jobs, the costs of undershooting are much higher - requiring the firm to pay for an outside search, a market premium, and perhaps also the costs related to integrating the new hires and absorbing associated risks, such as misfits.

PRINCIPLE **2** **Adapt to the Uncertainty in Talent Demand**

If you buy all of your components in bulk and store them away in the warehouse, you are probably buying enough material to produce years of product and therefore have to forecast demand years in advance. But if you bring in small batches of components more often, you don't have to predict demand so far out. The same principle can be applied to shortening the time horizon for talent forecasts in some interesting, and surprisingly simple, ways.

Consider the problem of bringing a new class of candidates into an organization. At companies that hire directly out of college, the entire pool of candidates comes in all at once, typically in June. Let's assume they go through an orientation, spend some time in training classes, and then move into developmental roles. If the new cohort has 100 people, then the organization has to find 100 developmental roles all at once, which can be a challenge for a company under pressure, say, to cut costs or restructure.

But in fact many college graduates don't want to go directly to work after graduation. It's not that difficult to split the new group in half, taking 50 in June and the other 50 in September. Now the program only needs to find 50 roles in June and rotate the new hires through them in three months. The June cohort steps out of those roles when the September cohort steps into them. Then the organization need find only 50 permanent assignments in September for the June hires. More important, having smaller groups of candidates coming through more frequently means that forecasts of demand for these individuals can be made over shorter periods throughout their careers. Not only will those estimates be more accurate but it will be possible to better coordinate the first developmental assignments with subsequent assignments - for instance, from test engineer to engineer to senior engineer to lead engineer,

A different way to take advantage of shorter, more responsive forecasts would be to break up a long training program into discrete parts, each with its own forecast. A good place to start would be with the functionally based internal development programs that some companies still offer. These programs often address common subjects, such as general management or interpersonal skills, along with function-specific material. There is no reason that employees in all the functions couldn't go through the general training together and then specialize. What used to be a three-year functional program could become two 18-month courses. After everyone completed the first course, the organization could reforecast the demand for each functional area and allocate the candidates accordingly. Because the functional programs would be half as long, each forecast would only have to go out half as far and would be correspondingly more accurate. An added advantage is that teaching

everyone the general skills together reduces redundancy in training investments.

Another risk reduction strategy that talent managers can borrow from supply chain managers is an application of the principle of portfolios. In finance, the problem with holding only one asset is that its value can fluctuate a great deal, and one's wealth varies a lot as a result, so investment advisers remind us to hold several stocks in the same portfolio. Similarly, in supply chain management it can be risky to rely on just one supplier.

For a talent-management application, consider the situation in many large and especially decentralized organizations where each division is accountable for its own profit and loss, and each maintains its own development programs. The odds that any one division will prepare the right number of managers to meet actual demand are very poor. Some will end up with a surplus, others a shortfall. If, however, all of these separate programs were consolidated into a single program, the unanticipated demand in one part of the company and an unanticipated shortfall in another would simply cancel out, just as a stock portfolio reduces the volatility of holding individual stocks. Given this, as well as the duplication of tasks and infrastructure required in decentralized programs, it is a mystery why large organizations continue to operate decentralized development programs. Some companies are in fact creating talent pools that span divisions, developing employees with broad and general competencies that could be applied to a range of jobs. The fit may be less than perfect, but these firms are finding that a little just-in-time training and coaching can help close any gaps.

PRINCIPLE 3 Improve the Return on Investment in Developing Employees

When internal development was the only way to produce management talent, companies might have been forgiven for paying less attention than they should have to its costs. They may even have been right to consider their expensive development programs as an unavoidable cost of doing business. But the same dynamics that are making today's talent pool less loyal are presenting opportunities for companies to lower the costs of training employees and thereby improve the return on their investment of development dollars, as they might from any R&D effort.

Perhaps the most novel approach to this challenge is to get employees to share in the costs. Since they can cash in on their experience on the open market, employees are the main beneficiaries of their development, so it's reasonable to ask them to contribute. In the United States, legislation prevents hourly workers from having to share in the costs of any training required for their current job. There are no restrictions, however, even for hourly workers, on contributing to the costs of developmental experiences that help prepare employees for future roles.

People might share the costs by taking on learning projects voluntarily, which means doing them in addition to their normal work. Assuming that the candidates are more or less contributing their usual amount to their regular job and their pay hasn't increased, they are essentially doing these development projects for free, no small investment on their part. Pittsburgh-based PNC Financial Services is one of several companies that now offer promising employees the opportunity to volunteer for projects done with the leadership team, sometimes restricting them to ones outside their current functional area. They get access to company leaders, a broadening experience, and good professional contacts, all of which will surely help them later. But they pay for it, with their valuable time.

Employers have been more inclined to experiment with ways to improve the payoff from their development investments by retaining employees longer, or at least for some predictable period. About 20% of U.S. employers ask employees who are about to receive training or development experiences to sign a contract specifying that if they leave the business before a certain time, they will have to pay back the cost. As in the market for carbon credits, this has the

The language of the talent-on-demand framework is driven by operations-based tools better suited to the challenges of uncertainty.

effect of putting a monetary value on a previously unaccounted for cost. This practice is especially common in countries like Singapore and Malaysia: Employees often leave anyway, but typically the new employer pays off the old one.

A more interesting practice is to attempt to hang on to employees even after they leave, making relatively small investments in maintaining ties. Deloitte, for example, informs qualified former employees of important developments in the firm and pays the cost of keeping their accounting credentials up-to-date. Should these individuals want to switch jobs again, they may well look to the place where they still have ties: Deloitte. And because their skills and company knowledge are current, they will be ready to contribute right away.

PRINCIPLE 4 — Preserve the Investment by Balancing Employee-Employer Interests

The downside of talent portability, of course, is that it makes the fruits of management development perishable in a way they never were in the heyday of the internal development model. It used to be that managers and executives made career decisions for employees, mating individuals and jobs. In the organization-man period, the company would decide which candidates were ready for which experience, in order to meet the longer-term talent needs of the organization. Employees had little or no choice: Refusing to take a new position was a career-ending move.

Today, of course, employees can pick up and leave if they don't get the jobs they want inside - and the most talented among them have the most freedom to do so. In an effort to improve retention, most companies - 80% in a recent survey by applicant-tracking company Taleo - have moved away from the chess-master model to internal job boards that make it easy for employees to apply for openings and so change jobs within the organization. Dow Chemical, for example, cut its turnover rate in half when it moved its vacancies to such internal boards.

These arrangements have effectively turned the problem of career management over to employees. As a result, employers have much less control over their internal talent. Employees' choices may not align with the interests of the employer, and internal conflicts are increasing because half of the employers in the U.S. no longer require that employees seek permission from their supervisors to move to new positions.

So it has become imperative for companies to find more effective ways to preserve their management development investment. The key is to negotiate solutions that balance the interests of all parties. McKinsey's arrangement for associates relies not only on how they rank their preferences for projects posted online but also on how the principals running the projects rank the associates. The final decision allocating resources is made by a senior partner who tries to honor the preferences of both sides while choosing the assignment that will best develop the skill set of each associate. Bear, Stearns established an office of mediation, which negotiates internal disputes between managers when an employee wants to move from one job to another in the firm.

The talent problems of employers, employees, and the broader society are intertwined. Employers want the skills they need when they need them, delivered in a manner they can afford. Employees want prospects for advancement and control over their careers. The societies in which they operate and the economy as a whole need higher levels of skills - particularly deeper competencies in management - which are best developed inside companies.

Those often-conflicting desires aren't addressed by existing development practices. The language and the frameworks of the organization-man model persist despite the fact that few companies actually employ it; there simply aren't any alternatives. The language comes from engineering and is rooted in the idea that we can achieve certainty through planning - an outdated notion. But before an old paradigm can be overthrown there must be an alternative, one that describes new challenges better than the old one can. If the language of the old paradigm was dominated by engineering and planning, the language of the new, talent-on-demand framework is driven by markets and operations-based tools better suited to the challenges of uncertainty. Talent on demand gives employers a way to manage their talent needs and recoup investments in development, a way to balance the interests of employees and employers, and a way to increase the level of skills in society. ▽