Operational Workforce Planning is Quietly Transforming HR

By Ray J. Rivera, SAP Labs, LLC and Frans Smolders, SAP AG

Leaders need to put their money where their mouth is and get HR to do its real job: elevating employee management to the same level of professionalism and integrity as financial management. Since people are the whole game, what could be more important? [1]

– Jack Welch, former chairman and CEO, General Electric

Overview

Top-performing businesses recognize that insights they can extract from their own data are crucial to maintaining competitive advantage.[2] Some of their most important insights involve the dynamics of their workforces, and the capacity to adapt quickly.[3] Yet, many companies are becoming much more complex: teams are distributed worldwide, alliances involve numerous partners, and production requires coordinating specialized skills globally. The need for managers to know their workforces has never been greater, and deciding how to staff these complex business functions relies on better evidence of what really drives results.[4] Workforce planning represents a major transformation of the role and competencies of HR, making it a driver of business growth and operational efficiency throughout the enterprise. In this article, we will show how an operational approach to workforce planning contributes to both, and how it makes HR a more effective business partner.

What is Operational Workforce Planning?

At its core, *operational workforce planning* (or, *operational head count planning*) is a matter of matching supply and demand, subject to financial constraints.[5] In practice, it is a business process aimed at maximizing the contributions and productivity of labor inputs in the short- to medium-term, according to specific organizational goals that in turn are informed by corporate strategy.[6]

Operational workforce planning has three components: (1) mapping the employee skills, knowledge, capabilities, and competencies to job profiles; (2) allocation of head count across an entire organization; and (3) analysis of the gap between desired and actual head count.

Considered as a business process, operational workforce planning should be conducted in a manner similar to corporate budgeting, and can be broken down into four sequential steps: *preparation*, *planning*, *consolidation*, and *execution*. Likewise, operational workforce planning involves a considerable amount of data analysis and effective transmission of information across business units and levels of management, both of which are critical in creating a successful final product.

1. Preparation

The first objective is to provide regional and local management with clear insights into the workforce so that correct assumptions can be made, and questionable ones get challenged and refined. The first task involves budget preparation, where current personnel costs are obtained, and head count evolvement assumptions are assembled. Next, a preliminary budget proposal is created based on assumptions and cost drivers. Human Resources may perform these tasks independently or, more commonly, in consultation with Finance. At this point, the Budgeting and Controlling function often sets up guidelines to align budgeting layers, and all participating managers are typically provided with prefilled head count planning templates.

2. Planning

The next step, *planning,* can be characterized by the three words: assess, simulate and plan. Here, managers make head count proposals based on the most reliable and accurate figures they can determine. It begins by analyzing the current workforce, based on prefilled templates and, in some cases, reviewing promotions, leavers, retirements and other separations. In many large organizations, there is enough information to create workforce scenarios. What-if scenarios are often performed to optimize head count proposals, and initial guidelines are obtained to model head count forecasts. In many cases, such scenarios are performed extemporaneously, either in one's head or using a spreadsheet.

A key objective of the planning step is for line managers to obtain budget insight that illustrates the consequences their actions might bring about. While the budget, both head count and salary, emerges from a top-down demand planning process, a line manager usually has some latitude in judging the most appropriate ways to apply the budget within his or her business unit. By commenting, the manager can apprise senior management of the scope of his or her part of the organization.

Later, during the consolidation stage, when top-down demand planning and bottom-up supply planning become aligned, the line manager's commentary can provide valuable insight for senior management in determining whether the strategy they have laid out is also executable by middle management.

3. Consolidation

The previous step, *planning*, usually generates numerous documents, and so it is important to consolidate the results. During the *consolidation* step, the results of all business units' operational head count plans are condensed into a dataset that, ideally, can be entered directly into the enterprise financial planning system. Consolidation usually requires additional software support when managing complex transactions such as calculations using multiple currencies, inter-group transfers and full-time equivalant allocations. In most organizations, a computing infrastructure exists to perform this step by means of an automated roll-up. However, many organizations continue to do the roll-up manually, which increases the likelihood of introducing human error into the process.

Yet, even if the roll-up is automated, controllers must still monitor the process personally, keeping track of all business workflows, the assigned managers, and the budgeting tasks. The result is a consolidated outcome, which in most organizations incorporates all departmental planning templates. The final roll-up becomes the proposal that is later submitted for finalization, which may be refined by additional iterations of cost drivers and assumptions according to overall corporate guidelines.

4. Execution

The final step is where assumptions are validated, as top executives review the plans, determine the planning policies, and set the direction. Top managers typically perform an additional analysis of the current workforce to assess and drill down to lower level management explanations in order to understand the complete picture. Once satisfied with their analysis, they can decide on future head count. This step often serves to provide actionable insight by which to optimize head count decisions. And, in some cases, discover incorrect assumptions that need to be reassessed by the planning team before the plan is finalized.

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Senior management can have significant influence on the final plan, along with the effectiveness by which it is communicated and carried out. High-quality, deliberate management can add refinements to workforce plans and direct resources needed for proper execution. Conversely, inadequately informed or impulsive management can overrule solid plans, or interfere with the execution of otherwise well-formulated plans. Additionally, workforce plans that managers perceive as conflicting with shareholder demands or performance incentives are likely to be altered so as to align with those perceptions.

From this final plan, workforce action plans and other management control systems are established. Managerial control is the single most important means of maintaining alignment, as it provides mechanisms for systematic handling of performance information, consistent measurement of organizational behaviors, and managing by exception.[7] The scope of control systems in regular corporate budgeting can stretch across the enterprise, and likewise for operational workforce planning. Workforce action plans are applied to areas such as business workforce plans, training and development programs, recruiting, promotions, as well as sourcing decisions such as contractor management, contingent workforce and partner management.

A Revising of the Ways HR becomes a Business Enabler

As a business enabler, HR can improve organizational performance by providing insight about the workforce to guide specific action. Furthermore, such insight must be forward-looking in order to deliver the value that HR has the potential to deliver. Specificity is critical, and assembling and allocating the workforce, particularly in the short- to medium-term is an area where analytics can help HR provide valuable forward looking insight. Such insight is critical for business growth, which, for many organizations, must proceed from better management of its workforce.[8]

What sort of workforce management supports growth? Sustained growth companies tend to practice superior human capital management at a strategic level by shaping culture through leadership development and training, and retaining talent.[9] At a more operational level, companies noted for superior human capital management distinguish themselves in three ways: visibility of job roles critical to

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organizational success; integration of talent management and business data; and processes to identify gaps between workforce supply and business demand.[10] In short, business enablement for HR is characterized increasingly by applying the procedures and discipline of operational workforce planning to address the immediate concerns of growth and efficiency.

1. Business Value versus Cost Reduction

Since the late 1980s, there has been a focus among HR leaders on *strategic human resource management*.[11] The argument followed that in order to rise above the role of a cost center, HR needed to shift away from tending primarily to administrative tasks to becoming a partner in corporate strategy.[12]

In many organizations, solutions such as automated salary and head count with integrated workflow, currency conversion, and consolidation were originally implemented with the aim of unburdening HR executives from tactical activities so they could devote more time to strategic activities.[13] Ironically, it is resulting in greater HR attention toward the enterprise-wide benefits of efficient operations within the HR *function*,[14] particularly regarding the composition of the workforce.[15]

Advances in data provisioning and visualization are making data more accessible across the organization and driving greater standardization. No longer hoping for a single metric that captures the enterprise value of the company's human capital, HR is using analytics to discover the unique practices within their own organizations which drive increased performance,[16] and the means to implement, measure, and monitor effective and efficient practices.[17]

Improved HR operations performance can represent a significant source of unlocked value. A 2010 study by *MIT Sloan Management Review* and the IBM Institute for Business Value found that top performing organizations differentiate themselves by their use of analytics in the areas of *workforce planning and allocation* and *risk management*.[18] In addition, top performing organizations were twice as likely to use analytics to guide daily operations as lower performing organizations, and tended to use analytics to achieve desired operational behaviors rather than strategic outcomes.

When considering together the findings from research, advances in computing, and refinement in HR practice, one of the most important aspects of HR's role as a business enabler is illuminated: HR analytics and operational excellence complement one another, particularly around operational head count planning, where insight into workforce planning is matched with sound decisions of how to allocate key staff.

2. The New Voice of HR

For many years, Human Resources has been advocating for a greater voice by its potential to contribute to business strategy.[19] Yet, ironically, it is arriving at this goal through the back door, as a partner in business operations instead.[20] Additionally, HR's increasing voice is coming about through management pull, not HR push, as new expectations of senior management dictate that HR produce consistent results and drive continuous performance improvement.[21]

To illustrate, just two years ago, the Conference Board found business growth to be the number one priority among senior managers globally, followed by the acquisition, retention and development of talent.[22] Yet, as global prospects for growth tempered, the Conference Board reported in early 2013 that senior managers regarded human capital and operational excellence as the top two respective challenges facing their organizations.[23] Since many executives now regard business growth and competitive advantage to be nearly impossible to achieve without developing talent internally, human capital management no longer resides solely in HR's shop, nor does it remain strictly a strategic issue. Rather, it is an immediate operational matter that addresses an immediate problem: the likelihood that even short-term plans will not be executed adequately and next quarter's performance goals will fall short of expectations.

Increasing awareness of the likelihood of adverse people events is another reason for the changing voice of HR. As part of its earlier efforts to become a strategic partner, HR became preoccupied with developing and managing *high performance work practices*,[24] particularly in areas where high performance was closely associated with business value.[25] Yet, as the focus of HR shifts from the strategic to the operational, the task of managing risk associated with human capital becomes as prominent as potential performance.[26] A new partnership is emerging between HR, enterprise risk management and senior management, one where HR assumes a controlling function. In terms of operational head count planning, this gives rise to the operational workforce planning process, which is characterized by well-defined steps for aligning workforce supply and demand, allocating resources, and managing variations, or performance gaps.

3.The Changing Perspective of HR Expenditures

Before the worldwide financial crisis of the last decade pervaded every aspect of business, HR departments were, in general, enjoying yearly increases in expenditures and staff.[27] During the recession years of 2008 to 2010, top-performing companies cut their HR costs by an average of 13 percent.[28] Some of this reduction in cost can be attributed to automation, and not simply head count reduction.[29] There are still doubts as to whether authentic cost reductions are achieved through head count reduction.[30] By as early as 2009, HR costs per employee were trending back upward toward pre-crisis levels of approximately US$1,600 per employee.[31] Finally, by late 2010, HR budgets appeared to be mostly recovered,[32] achieving a sustainable level of cost-effectiveness.[33]

Automation and a move to shared services explained some of the efficiency gains in the HR *department*.[34] Yet, it is easy to overlook the simultaneous efficiency gains in the HR *function*, [35] which are achieved when information technology enhances existing resources available *throughout* the organization.[36] In other words, careful deployment of automation within the HR department and analytical insight into the company's HR practices facilitated greater efficiency in HR operations without needing to cut unnecessarily from the HR staff.[37]

Other studies reinforce the idea that information technology usage and HR effectiveness complement one another. Rather than a means of positioning HR as a strategic partner, greater effectiveness in HR transactional areas represents a worthwhile end in itself, by virtue of how well it facilitates greater information-processing capacity and decision-support throughout HR operations.[38] Even more precisely, efficiency gains in HR operations and cost reductions that followed the information technology expenditures have been found to exceed the information technology expenditures, and furthermore complemented other internal process improvements.[39]

In summary, it is important to consider HR expenditures not in isolation, which confines HR to being a cost center, but rather as a value-producing investment tightly coupled with IT and Finance, capable of improving process and performance management,[40] as well as enabling revenue growth.[41] Additionally, HR cost reductions are more likely to be achieved through efficiency gains enabled by information technology investment, which reach across the HR function, rather than a simple reduction in HR department head count.

Head Count and Cost Planning from a Financial Perspective

Although we have been trying to get to a single best practice process, there are many different approaches to workforce planning. One that is widely adopted is the head count planning approach that is driven by Finance departments.

One of SAP's customers in the transportation and warehousing industry was highly successful in reducing operating expenses, while simulataneously increasing the company's performance by integrating both head count and employee cost planning processes into their overall business planning.

After analyzing how revenues varied throughout year, this organization found out that profitability was highly influenced by how tightly aligned cost planning is integrated with sales. As in most transportation and warehousing organizations, successfully processing and delivering each order is highly labor intensive, involving significant variable costs that are driven by labor.

In order to get matters under tighter control, the organization implemented new functionality on a SAP platform that could handle multiple operational planning processes in parallel.

This organization's performance frequently suffered due to a process that lacked effective controls and transparency at a tactical level. Having a process that lacked the capability to sufficiently accommodate to the quarterly changing needs of a publicy traded company, the organization could not easily attain rapid recovery times as issues emerged during critical planning cycles.

In order to get matters under tighter control, the organization implemented new functionality on a SAP platform that could handle multiple operational planning processes in parallel. The system supported the integration of HR planning into the overall operational business plan that is owned by their Financial Planning and Analysis department.

Their head count planning process focused on a 16-month planning cycle that revolved on a so-called ”employee-level planning.” Throughout the cycle, there was the need from both Finance and line management for insight into various cost items, such as salary and overtime cost. By adding a financial component to the head count planning process, the organization improved accountability across all parts of the business, thereby creating a more effective cost management solution.

After evaluating their head count planning processes, HR managers realized that, in fact, they had two separate types of employees and labor requirements. The first group was the "non-exempt hourly associates," which was characterized by high turnover and variable cost. In contrast, the second group, the ”exempt associates,”experienced low turnover and could, therefore, be treated as a fixed cost. By creating separate planning templates for these two groups, HR managers could plan and account for differing assumptions. In turn, such precision increased efficiency and focus on variable labor planning.

As in most cost planning processes, the operational and bottom-up portion of planning are used to make assumptions and projections on an aggregated, tactical level. Splitting employee groups at an operational level facilitated more refined assumptions at later stages in the head count planning process but were, however, still in line with lower level management's expectation.

As a result, this organization was better enabled to plan investment decisions by using "roll forward" employee cost and head count planning, because business planners in the organization had planning templates that resembled their business process and they felt more accountable due to the added employee cost component.

Conclusion

What does this all mean for the HR professional?

If competitive advantage in the global economy is driven by intangible assets that are tied to people, then those assets must be managed with the same discipline, integrity, and transparency with which traditional capital assets were managed in the last century. Managerial HR needs to be developed in the same way as managerial accounting was developed in the 1980s and 1990s to manage global corporations. In other words, there is a need for a quantified, enterprise-wide analysis of the financial impact of intangible assets tied to people, and the means to apply proper governance to human capital assets. The techniques of operational workforce planning provide the means to do so, and can give senior managers the same confidence as Jack Welch displayed when he declared, "Without question, the HR officer is the equal to the CFO."[42]

Endnotes

1 J. Welch & S. Welch, "So many CEOs get this wrong," *Businessweek*, (3993), 92, 2006.

2 D. Kiron & R. Shockley, "Creating business value with analytics." *MIT Sloan Management Review*, *53*(1), 57-63, 2011; T.H. Davenport & J.G. Harris, *Competing on analytics: The new science of winning*, Boston, MA: Harvard Business School Press.

3 J.G. Harris, E. Craig, & D.A. Light, "Talent and analytics: New approaches, higher ROI," *Journal of Business Strategy*, 32(6), 4-13, 2011; A. Levenson, "Using targeted analytics to improve talent decisions," *People & Strategy*, *34*(2), 34-43, 2011.

4 J. Pfeffer & R.I. Sutton, *Hard facts, dangerous half-truths, and total nonsense: Profiting from evidence-based management*, Boston, MA: Harvard Business School Press, 2006.

5 D.J. Bartholomew, "Manpower planning," in S. I. Gass & C. M. Harris (Eds), *Encyclopedia of operations research and management science*, (2nd ed., pp. 471-473), Boston, MA: Kluwer Academic, 2001.

6 J. Fitz-enz, *The new HR analytics: Predicting the economic value of your company's human capital investments*, New York, NY: AMACOM, 2010; J.W. Boudreau & P.M. Ramstad, *Beyond HR: The new science of human capital*. Boston, MA: Harvard Business School Press, 2007; K.F. Shen, "The analytics of critical talent management," *People & Strategy*, *34*(2), 50-56, 2011; E. Heery, & M. Noon, *A dictionary of human resource management*, Oxford, UK: Oxford University Press, 2001.

7 R. Simons, "The role of management control systems in creating competitive advantage: New perspectives," *Accounting, Organizations & Society*, *15*(1/2), 127-143, 1990; K.A. Merchant, "The control function of management," *Sloan Management Review*, *23*(4), 43-55, 1982.

8 Conference Board, "*The Conference Board CEO challenge 2011: Fueling business growth with innovation and talent development*," New York, NY: The Conference Board, Inc., 2011; M. Lombardi, The 2011 HR executive's agenda: Automation, innovation and growth, Research Report, Aberdeen Group, 2010.

9 R. McGrath, "How the growth outliers do it." *Harvard Business Review*, 90(1/2), 110-116, 2012.

10 M. Lombardi, "Buy vs. build: Managing the talent pipeline through data," Research Report, Aberdeen Group, 2011.

11 R.S. Schuler, & S.E. Jackson, "Linking competitive strategies with human resource management practices," *Academy of Management Executive,* 1(3), 207-219, 1987; P.M. Wright & G.C. McMahan, "Theoretical perspectives for strategic human resource management," *Journal of Management*, 18(2), 295-320, 1992.

12 E.E. Lawler & J.W. Boudreau, "What makes HR a strategic partner?," *People & Strategy*, 32(1), 14-22, 2009; E. Lawler & S. Mohrman, "HR as a strategic partner: What does it take to make it happen?," *Human Resource Planning*, 26(3), 15–29, 2003; J.B. Barney & P.M. Wright, "On becoming a strategic partner: The role of human resources in gaining competitive advantage," *Human Resource Management Journal*, 37(1), 31–46, 1998.

13 J.H. Marler, "Making human resources strategic by going to the Net: Reality or myth?," *International Journal of Human Resource Management*, 20(3), 515-527, 2009.

14 B. Hults, "Integrate HR with operating strategy," *HR Magazine*, 56(10), 64-66, 2011.

15 S. Jarugumilli & S.E. Grasman, "Workforce planning the systems way," *Industrial Engineer,* 43(7), 35-39, 2011.

16 J.O. Chan, "A conceptual model for operations-analytics convergence, "*Journal of American Academy of Business, Cambridge*, 8(1), 48-54, 2006

17 N. Gardner, D. McGranahan & W. Wolf, "Question for your HR chief: Are we using our 'people data' to create value?," *McKinsey Quarterly*, (2), 117-121, 2011.

18 S. LaValle, E. Lesser, R. Shockley, M.S. Hopkins & N. Kruschwitz, "Special report: Analytics and the new path to value," *MIT Sloan Management Review*, 52(2), 22-32, 2011.

19 K. Pritchard, "Becoming an HR strategic partner: Tales of transition," *Human Resource Management Journal*, 20(2), 175-188, 2010; L. Bassi & D. McMurrer, "Maximizing your return on people" *Harvard Business Review*, 85(3), 115-123, 2007; M. Beer, "The transformation of the human resource function: Resolving the tension between a traditional administrative and a new strategic role," *Human Resource Management*, 36(1), 49-56, 1997.

20 T. Crook, J.G. Combs, S.Y. Todd, D.J. Woehr & D.J. Ketchen, "Does human capital matter? A meta-analysis of the relationship between human capital and firm performance" *Journal of Applied Psychology*, 96(3), 443-456, 2011.

21 Deloitte Consulting, LLP, *Human capital trends 2011: Revolution/evolution*, Retrieved March 16, 2012, from http://www.deloitte.com/assets/Dcom-United-States/Local%20Assets/Documents/us_consulting_HC-Trends2011_051211.pdf.

22 Conference Board, The Conference Board CEO Challenge 2011: Fueling business growth with innovation and talent development, New York, NY: The Conference Board, Inc., 2011.

23 Conference Board, The Conference Board CEO Challenge 2013 summary report: Countering the global slowdown, New York, NY: The Conference Board, Inc., 2013.

24 M.A. Huselid, "The impact of human resource management practices on turnover, productivity, and corporate financial performance," *Academy of Management Journal*, 38(3), 635-672, 1995.

25 E.E. Lawler, A. Levenson & J.W. Boudreau, "HR metrics and analytics: Use and impact," *Human Resource Planning*, 27(4), 27-35, 2004.

26 See for example, J. Lewis, "Did HR fuel the demise of Enron?," *Personnel Today*, 22-24, 2002.

27 "More staff, bigger budgets, for HR depts.," *HR Focus*, 84(2), 1-15, 2007; HR benchmarks: Median HR budgets in finance at 1.6 percent of total operating costs, Controller's Report, (5), 13-14, 2009; HR benchmarks, Controller's Report, (4), 7-8, 2007

28 Despite recession, world-class HR organizations reduce costs by 13 percent, Controller's Report,(8), 1, 18-19, 2011.

29 HR metrics: HR labor costs per employee average $798 at 1,000-employee companies, Controller's Report, 2009(1), 15, 2009.

30 E. Parry, "An examination of e-HRM as a means to increase the value of the HR function," *International Journal of Human Resource Management*, 22(5), 1146-1162, 2011.

31 M. O'Brien, "HR costs rebounding?," *Human Resource Executive Online*, November 29, 2010. Retrieved March 13, 2012, from http://www.hreonline.com/HRE/story.jsp?storyId=533326179.

32 D. Meinert, "HR budgets show modest growth," *HR Magazine*, 56(11), 24, 2011.

33 Despite recession, world-class HR organizations reduce costs by 13 percent, Controller's Report, (8), 1-19, 2011.

34 "How technology can help ease cost and HR budget limits," *HR Focus*, 86(7), 8, 2009; T.W. Gainey & B.S. Klaas, "The use and impact of e-HR: A survey of HR professionals," *People & Strategy*, 31(3), 50-55, 2008.

35 "HR tackles budget cuts by sharpening focus of L&D," *People Management*, 9, 2010; "HR plays major role in curbing company costs, analysts say,"*HR Focus*, 87(9), 1-4, 2010.

36 N. Melville, K. Kraemer & V. Gurbaxani, "Information technology and organizational performance: An integrative model of its business value," *MIS Quarterly*, 28(2), 283-322, 2004.

37 N. Khatri, A. Baveja, N.M. Agrawal & G.D. Brown, "HR and IT capabilities and complementarities in knowledge-intensive services," *International Journal Of Human Resource Management*," 21(15), 2889-2909, 2010.

38 V.Y. Haines & G. Lafleur, "Information technology usage and human resource roles and effectiveness," *Human Resource Management*, 47(3), 525-540, 2008.

39 M.K. Fung, "To what extent are labor-saving technologies improving efficiency in the use of human resources? Evidence from the banking industry," *Production & Operations Management*, 17(1), 75-92, 2008.

40 S. Mithas, N. Ramasubbu & V.V. Sambamurthy, "How information management capability influences firm performance," *MIS Quarterly*, 35(1), 137-A15, 2011.

41 S. Mithas, A. Tafti, I. Bardhan & J.M. Goh, "Information technology and firm profitability: Mechanisms and empirical evidence," *MIS Quarterly*, 36(1), 205-224, 2012.

42 B. Streeter, "The secret to success. Can you guess it?" *ABA Banking Journal,* pp. 7-12, December 2006.

About the Authors

Frans Smolders is a solution owner at SAP, focusing on HR planning and analytics solutions. He has a long history in product management and HR consultancy working for *Fortune* 500 companies with a broad focus on HR analytics and HR core processes like organizational and cost planning. He can be reached at ***frans.smolders@sap.com***.

Ray Rivera has more than a decade of experience in both the theory and practice of workforce analytics, frequently working at the intersection of the two. His roles have included author, scholar, consultant, software designer, and software product manager. He received his Ph.D. from Stanford University, where he investigated the effect of training investments on financial performance. He can be reached at ***ray.j.rivera@gmail.com***.