New Methods Are Needed to Improve Corporate Recruiting Effectiveness

Corporate recruiting departments need to rethink the sacred cows—resumes, job descriptions, and interviews—and partner with hiring managers to improve work designs and management systems, so as to better attract and retain high-quality talent. Early access to humaneering technology provides science-based principles, methods, and tools to meet this challenge.

By James Pepitone and Robert Wyatt

Corporate recruiting is a powerful form of competition, and increasingly a source of competitive advantage. Businesses succeed or fail based on getting the right people into the organization and into the right roles.

Furthermore, corporate recruiting's power is steadily increasing as the nature of human work shifts from *machine labor* (i.e., making and moving things) to *knowledge work* (i.e., creating and applying knowledge) and, as a result, the creation of economic value becomes more dependent on people. The costs and risks of hiring the wrong people and placing people in the wrong roles are now more substantial than ever before.

As management's "advance team" in the talent marketplace, recruiting hears first-hand what targeted candidates are seeking in an employment experience and what other employers are offering in order to attract them. Corporate recruiting also communicates directly with candidates through personal networking and representation of the company's employer brand. This direct contact enables recruiting to know first-hand the response this brand message generates with targeted groups.

When enabled with resources and authority, corporate recruiting can move quickly to adapt to changing talent market conditions and trends, and to seize opportunities to increase the coverage and accuracy of its reach into talent markets. For example, recruiting moved more quickly than many corporate functions to seize upon the rising popularity and helpful features of social media in order to project a human spirit, thus making companies more attractive and approachable to targeted candidates.

For these reasons the nonprofit Humaneering Institute has selected corporate recruiting for early access to humaneering technology—human science principles, methods, and tools for maximizing human effectiveness, now in field trials (i.e., private beta). This article provides information for corporate recruiters not yet familiar with humaneering technology and the "Early Access" field trial program supporting its development.

Technology for Human Effectiveness

Imagine your company's recruiting process without resumes, job descriptions, and interviews. What impact would this change have on your ability to recruit high-quality candidates, and on a hiring manager's selection decisions? Our research indicates a high probability that candidates identified and hired will improve, substantially.

How could this be? When tested, it turns out that all three of these tools are so ineffective and, worse yet, misleading, that you and your hiring managers would be better off without them. Not only do they routinely contain misinformation, they do not contain information vital for recruiting people for today's work. This is just one of many potentially surprising conclusions that is emerging from the ongoing research to develop humaneering technology.

The process to develop humaneering technology begins with thorough reviews of the relevant human sciences, including theory and practice disciplines. Through the human sciences we are able to identify and better understand how human nature behaves. These reviews are conducted by panels made up of scholars, practitioners, and managers who

together examine and evaluate this knowledge. Further along in the development process we conduct field trials within host companies. These field trials focus on actual business problems and opportunities, in part because the meaningful measure of humaneering's effectiveness is the business result it creates.

Getting back to resumes, job descriptions, and interviews, virtually every alternative for these tools that we have tested yields better candidates and higher-quality hires. Perhaps this shouldn't be surprising. Early forms of resumes, job descriptions, and interviews were used 100 years ago (think Henry Ford and the Model T), even before there were personnel departments and recruiters. In those days, if ready to give up farming or casual labor for a factory job, people would wait outside the factory and in time be looked over by a supervisor in need of workers for specific tasks (job title and description). The supervisor would size up individuals quickly with a few questions (interview), and either hire them on the spot and pass along their paperwork (resume) to the payroll clerk, or simply keep looking. So began the applicant-to-hire process that is still in use today.

By 1910, growing companies created personnel offices to take care of the administrative details related to a growing continuous workforce. And during the next 30 years, this process became increasingly sophisticated based on employer needs, new laws, and new developments in the human sciences. Some of these enhancements included structured applications, formatted resumes, comprehensive job analyses, detailed job descriptions, formal interviewing procedures, and applicant-skill assessments. However, since the 1940s, the applicant-to-hire process has remained principally unchanged except for information processing advances made possible with computers and the Internet. (See Figure 1.)

Work and people have changed dramatically since then. Scholars and practitioners have developed a far deeper understanding of human nature and the conditions that enable people to be their most productive. Yet most of this knowledge remains unused. If aggregated and synthesized, this new knowledge could provide recruiters and hiring managers with more precise criteria for selecting individuals very likely to be successful. Furthermore, this same knowledge could provide operations managers with the means for achieving substantial improvements in workforce productivity and for resolving today's people management challenges.

Decade	Corporate Recruiting Evolves with New Technology
1900s	Frederick Taylor starts the use of workforce training to achieve the engineering standardization of human work, which leads to the valuing of experience and to continuous workforce employment, which in turn leads to recruiting the most able workers
1910s	Unified personnel office Employment application procedures Training for foremen/supervisors Hiring for individual differences like work ethic
1920s	Resumes used as pre-filled employment forms Hardcopy resume files of available workers Attempts to prevent and reduce turnover
1930s	Job analysis to better identify employee requirements Selection and placement tests
1940s	Hire for person-role fit Structured interviewing Merit rating system to measure performance
1950s	Facsimile (fax) machines
1960s	Photocopy (Xerox) machines Overnight shipping
1970s	Performance management Desktop computers
1980s	Internet communication Email adoption Behavioral interviewing
1990s	Company websites Online job boards Best company to work for ratings Onboarding
2000s	Online employment application systems Applicant tracking systems Video interviewing Social media for sourcing and job postings Employee feedback sites Employment branding
2010	Resume and data aggregators

Figure 1: Short History of Modern Recruiting and Related Technology

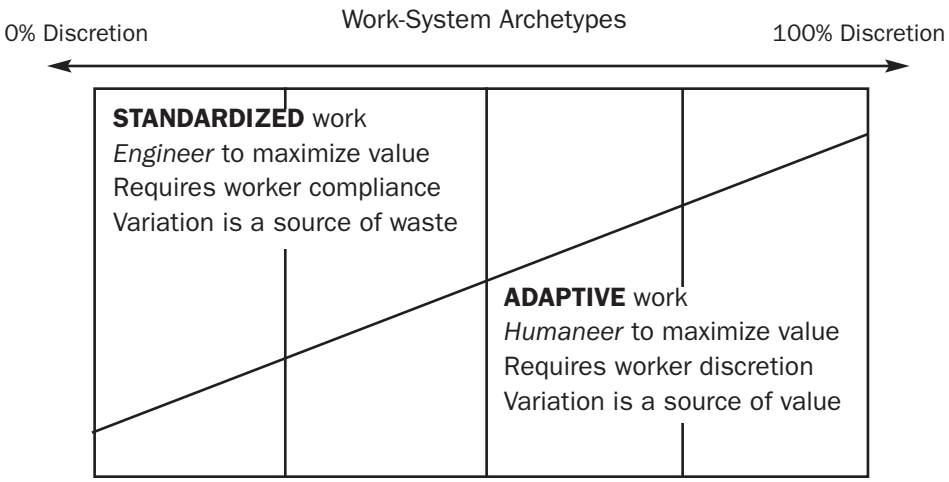
Humaneering Technology Basics

Why do we already have engineering technology (i.e., applied physical sciences), yet humaneering technology (i.e., applied human sciences) is still being developed?

The physical sciences (i.e., physics and chemistry) were the first to be developed using the scientific method, starting in the mid-17th century. Furthermore, the physical sciences provide a foundation for the human sciences (e.g., human beings are subject to the laws of gravity, motion and chemistry). Development of the human sciences did not begin until the early 20th century, and it wasn't until the late 1920s that human work was first studied by scholars of the human sciences.

In the future, how will engineering and humaneering be applied to human work?

Work designers and managers will use engineering to design the standardized elements of work, and use humaneering to design the adaptive elements of work. As illustrated below, all human work involves both standardized and adaptive behavior, and each of the four archetypes of work involves both kinds of behavior in different proportions. Work that is engineered (i.e., standardized) requires worker compliance, whereas work that is humaneered (i.e., adaptive) requires worker discretion. Engineering essentially limits and controls human nature to restrict people to the required behavior, while humaneering engages and supports human nature to optimize adaptive behavior. (*See Figure 3 for cases that discuss challenges resolved in each of the four work-system archetypes.)*



Classification	Production	Logistics	Service	Innovation
Method for Creating Value	Making Things	Moving Things	Applying Knowledge	Creating Knowledge
Industry Examples	Manufacturing	Transportation	Hospitality/Leisure	Start-ups
	Construction	Fast Food	Restaurant	R & D
	Chemical/Refining	Retail "Marts"	Retail "Shops"	Design
	Farming	Banking/Insurance	Police/Security	Advertising
	Publishing	Education	Consulting	Biomed/Pharma
	Printing	Utilities	Medical	Consumer Products
Role Examples	Equipment Operator	Delivery Driver	Manager/Supervisor	Entrepreneur
	Assembler	Product Sales	Solution Sales	C-level Executive
	Laborer	Call Center Agent	Entertainer	Author/Artist
	Cook/Food Prep	Bank Teller	Analyst/Engineer	Scholar/Researcher
	Piece Work	Instructor	Physician/Nurse	Designer
	Material Processing	Administrator	Craftsperson	Marketer

Figure 2: Human Work Involves a Fundamental Blending of Standardized and Adaptive Behavior

In most companies, executives and managers are not even aware of the untapped opportunity to apply this human-science knowledge for greater workforce productivity. Only a few major organizations (e.g., U.S. military) have specialists from the many human-science disciplines, in order to competently evaluate, synthesize, and apply this knowledge.

Before launching the Humaneering Institute, the founders studied this lack of awareness and application of human-science-based approaches to management. They concluded that managers needed a humaneering technology that essentially would do with the human sciences (i.e., biology, sociology, and psychology) what engineering technology has done with the physical sciences (i.e., physics and chemistry). They imagined that humaneering technology would make it much easier to understand and work with human nature in order to improve human effectiveness, just as engineering technology now makes it easy to understand and work with physical nature to improve roads, buildings and machine effectiveness.

When its development is completed, humaneering technology will be a systematically tested and factually represented, royalty-free and complete set of dependable principles, methods, and tools for achieving the highest possible levels of human effectiveness. Just imagine what businesses would be like today *without* engineering. That should help you appreciate what businesses will be like *with* humaneering.

The current marketplace for management ideas is driven not by science and its genuine search for truth and effectiveness, but by the persuasive promotion of proprietary products and services that generate the greatest financial potential for their suppliers. As a result, science-based innovation frequently loses out to less effective alternatives backed by marketing budgets, appealing presenters, and salespeople. Imagine if engineering knowledge was differentiated this way.

The first vision for humaneering technology appears in a 1940 textbook written by Dr. Joseph Tiffin (1905-1989), a respected industrial psychologist, and his colleagues at Purdue University. Among his accomplishments, Dr. Tiffin authored the principal industrial psychology text and numerous placement tests that guided staffing within the U.S. military during World War II. He could already see from his consulting work with industry in the 1930s how valuable the human sciences could be in achieving much higher levels of human effectiveness at work.

In the years that followed, scholars and practitioners from around the world continued to develop additional insights into human nature, with several beginning the task of integrating this knowledge within and across many disciplines. Consultants in the late 1980s, inspired by projects applying this neglected knowledge, developed and tested humaneering applications for improving the effectiveness of people-dependent business and government operations. This proprietary research progressed through the early 2000s, accumulating substantial proof of concept, and in 2005 contributed to the founding of the Humaneering Institute, a 501(c)(3) scientific organization with the mission to develop and maintain humaneering technology for the public good.

There is still much work ahead to ready humaneering technology for open-access public use, now scheduled for 2020. The Institute's *Early Access* program, which began in 2009, makes beta-level humaneering technology available now to selected companies that host private field trials within their operations. This program provides innovative and early-adopter companies with immediate opportunities to sample humaneering's potential, while enabling the Institute to conduct field tests essential for humaneering's development.

Positioned for Humaneering Leadership

The Humaneering Institute recently identified several organizational roles that are well positioned for field trials of humaneering technology. Recruiting is one of these roles, as is a frequent recruiting client: operations management. When working together on new hires, corporate recruiting and operations management are positioned to apply humaneering for substantial improvements to operations effectiveness and productivity.

Humaneering can enhance corporate recruiting's effectiveness. It can also be used by recruiting to partner with operations management—to improve the "fit" of new recruits, to solve stubborn people-related problems, and to improve the performance and productivity of people-dependent operations. To illustrate this potential, consider the following insights from previous field trials. See Figure 3 for even more.

One challenge we encounter frequently in field trials is the increasing need for greater accuracy in identifying high-quality candidates. Here we define a "high-quality" as a person who will be an excellent fit for the available job, including the job's specific roles and responsibilities and its unique circumstances (e.g., organization's culture, manager's style, specific performance objectives and constraints). So-called

Figure 3: Humaneering Solutions
Field trial examples illustrate humaneering's potential to solve problems across all kinds of work.

The 20th-century shift from machine labor (i.e., production and logistics work) to knowledge work (i.e., service and innovation work) has implications for the design of work. The principal change in jobs during this shift has been the increase in the amount of adaptive work—work that requires human discretion for performance—and decrease in the amount of standardized work—work that is preprogrammed or engineered and requires compliance for performance. As these four examples from field trials illustrate, all types of human work involve some level of worker discretion, such that the performance of all work is at least partially dependent on human nature. Simply stated, humaneering is technology for human nature, providing principles, methods, and tools for the design and management of the discretionary part of human work.

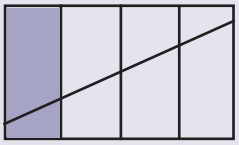


Figure 3a: Field Trial Example for "Production" Work (see Figure 2)

PRODUCTION

Diagnosis:
This major biomedical company produces several life-saving products. Manufacture of one product requires production technicians to work in especially unpleasant conditions (e.g., heat, odor, awkward protective clothing, risk of illness, etc.). The startup of a second production facility several states away from the original facility involved the staffing and four-month training of 200 new technicians. The staffing process had not gone well. Now, three years later, the operation continued to experience about 80% annual turnover of technicians, compared to turnover of less than 10% at the original facility. Over 90% of the technician new hires complete the challenging training program, pass the comprehensive exam and begin work. Direct interviews with current and former technicians revealed that these people, though strongly committed to the difficult work when hired, were unable over time to endure the conditions. Their commitment, though deep and genuine when hired, was emotionally unsustainable. Most resigning technicians did so reluctantly, feeling as though they had failed.

Treatment:
The tested treatment plan involved three initiatives that started within a week of preparation and operated concurrently. First, the job description was replaced with a video presentation of the job, including two sections, a "day in the life" overview and a review of the job's "top ten challenges," both prepared with the direct involvement of a task force of current production technicians. Second, an additional survey instrument was developed to identify and measure biopsychosocial characteristics, not to screen applicants, but for counseling them regarding challenges they should anticipate. Third, an organization development program was initiated to provide continuous psychological and social reinforcement for the technicians, essentially reminding them of the life-saving purpose of their work. This program included changes to the work environment, daily support activity, periodic group events, etc. Because of the cost, the treatment was implemented without a control group.

Results:
Turnover slowed immediately, falling to an annualized rate of about 20% within three months, and 8% within six months. Unexpectedly, about half of the vacancies were filled by prior technicians who had quit reluctantly and felt the new organizational support would sustain them.

Findings:
Even for production workers, biopsychosocial well-being is important, as is the interaction of a person and their work situation. Social and psychological forces are generally essential to maintaining a workforce that is performing work that is especially challenging (e.g., mining, military, structural steel).

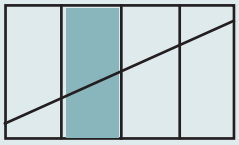


Figure 3b: Field Trial Example for "Logistics" Work (see Figure 2)

LOGISTICS

Diagnosis:

This 800-agent customer service call center for a major consumer products company continued to experience 130% annual turnover after two years. The potential for union organizing activity prompted corporate HR to go over the call-center director to seek an outside assessment of the center's external recruiter. Interviews of call center agents, supervisors, managers, and prior employees revealed that the external recruiter was performing surprisingly well in a difficult labor market, and consistently meeting its quotas with exemplary candidates. It was also learned that the six-week new-hire training program was not working, and that a combination of ineffective training and unhelpful frontline supervisors was ultimately responsible for the high voluntary and involuntary turnover. The training had been designed by a well-intentioned former agent with no professional instructional design and development qualifications. New hires patiently endured the training program with the expectation of learning on the job. However, the unsupportive supervisors' tough-minded approach, which replicated the center operations manager's style, made learning on the job an intolerable experience for many new agents. It was remarkable that many of the former employees expressed fondness for the company and its products, plus frustration and disappointment that they could not figure out a way to make the job work for them.

Treatment:

The corporate HR management responded to this assessment by requesting a swift response from everyone involved. A four-part treatment was implemented. First, recruiting was stopped for 30 days to allow time for a professional instructional designer to develop an effective training and onboarding program. Agents were selected for a project team to support the developer. By creating detailed workflows for all call types, the required learning period was reduced to a total of three weeks, which included four half-days a week of taking gradually more challenging customer calls. Second, coaching was immediately established as the principal method for supervising agents. Two half-day coaching clinics were quickly provided to establish a platform of common coaching practices across all supervisors and managers. Third, to assist supervisors who had been overwhelmed with the need to support their agents, the top 10% of agents were offered an overtime opportunity to become Support Coaches, first participating in the coaching clinics, and then assisting supervisors with their agents. Fourth, a one-week performance-improvement clinic, based on the new training design, was offered to all existing agents. About 70% took advantage of this opportunity.

Results:

As new agents exited the new training program, they were performing better than about 70% of other agents in the key performance indicators. Turnover for agents receiving the new training was under 30% for the first year. Turnover of agents previously hired slowed to below 40%. The productivity of agents in training increased to a level where the productivity matched that of existing agents, thus eliminating wages during training as a budget item.

Findings:

Recruiting high-quality candidates is an important first step, but this success can be undermined by poorly designed operations. Amateurish training is actually very expensive, as is an unsupportive management and supervisory style. Virtually all people start a new job with sincere intentions to do a good job for their employer. When faced with a high incidence of poor performance and or turnover, it generally pays to investigate the work design and management systems for the cause.

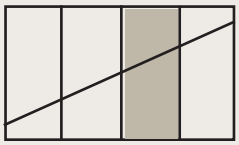


Figure 3c: Field Trial Example for "Service" Work (see Figure 2)

SERVICE

Diagnosis:

This pharmaceutical division's 1,000-person salesforce (i.e., detail representatives) was routinely ranked by sales volume, and the lowest 20% presented management with the obvious challenge. Setting aside the contingency and fluid nature of such rankings and the negative effect created for most of the people ranked, management wanted to take action to improve the performance of these 200 people, yet did not want to invest significantly or commit management's time to the initiative. The executive in charge had several other initiatives under way at this time, and while he did not want to disrupt these other efforts, he also did not want to neglect this group of low contributors. His term for them was "losers." This was a follow-up project, so we were already familiar with the situation and no additional insight was required. The prior initiative included the radical redesign of the company's onboarding process for new detail reps, with the principal objective of reducing the "time-to-competent"from about 15 months to 6 months. Based on the effectiveness of the first project, it was imagined that there must be something that could be done to improve this group's performance. Collaborating with the in-house training function staff, with whom the prior project was completed, we concluded that the single greatest constraint to these reps improving their performance was in fact the psychological impact of the characterization that they were low performers, along with the diminishing support that follows.

Treatment:

The treatment tested was a simple plan to have the company's sales training staff, in addition to their normal roles and responsibilities, divide up this group (i.e., approximately eight reps for each staff member) and begin an informal program of coaching support by telephone. To keep costs negligible, no travel would be involved. Each staff person, including those with no sales experience (e.g., administrative assistant, graphic artist, media developer), randomly selected a proportionate number of the 200 reps, and began making two calls a week to engage their reps in dialogue. The objective for these calls was to express interest and concern and to provide feedback and suggestions when possible and potentially helpful. The 200 next-higher-ranking reps served as the control group.

Results:

To the training staff's credit, they demonstrated a sincere interest in their reps, developed great enthusiasm, showed resourcefulness, and otherwise rose to the challenges presented. At the end of only three months, average sales for the 200 reps increased 24% over the prior three months. The process was extended, and at the end of six months average sales for the group had now increased 72% over the preceding six months. Also significant at the end of six months, 126 of the 200 reps were no longer ranked among the lowest 200 reps. In all but a few cases, these coached reps displaced reps from the control group, who now due to no fault of their own had fallen into a new group of company's lowest 200 reps.

Findings:

This situation demonstrates the importance to management of maintaining a positive and supportive culture for even the lowest-performing workers so as to tap the substantial power of high expectations and self-efficacy. Furthermore, it demonstrates how inexpensive attention to social and psychological factors (i.e., coaching, support) alone can unleash substantial economic value.

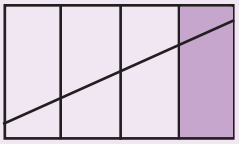


Figure 3d: Field Trial Example for "Innovation" Work (see Figure 2)

INNOVATION

Diagnosis:

The industry-award-winning direct supplier of custom chassis parts to the major auto companies was organized into 13 separate production operations under one roof, with each operation run by a production manager with P&L responsibility. All 13 of these production operations were supported by support operations including Purchasing, Warehousing, Shipping & Receiving, Operations Improvement, HR and Accounting functions, plus a comprehensive Engineering Group with separate engineering teams specializing in Design, Production Support and Maintenance. The overall facility was managed by a vice president who was completing his second year in this role, having risen through the ranks of the company's Operations Improvement unit, which routinely facilitated kaizen and Six-Sigma improvement initiatives. Within the past year, five production managers had resigned and two were terminated, and though the plant was operating close to plan, late-delivery penalties and scrap were increasing dramatically and several of the 13 production operations were struggling to realize their projected profit increases. The VP was curious what, if anything, might be done to improve the performance of the production managers, but not particularly concerned about the turnover in this role. Interviews were conducted with the current 13 production managers, four prior production managers, and a random representation of the support functions. It was learned that all of the production managers who resigned or were terminated reported frustration over the lack of support from the Engineering Group. It turned out that the Engineering Group was somewhat autonomous, with its own budget and reward system, and it focused more on the design of new products and less on support for production and maintenance. It was subsequently confirmed that the lack of support by the Engineering Group was undermining the efforts of the production managers who were entirely dependent on these resources. The VP had heard this before, but dismissed the comments as just excuses because every time he personally intervened to request support, it was provided.

Treatment:

Two production operations were selected for a limited trial run of a proposed new relationship with the Engineering Group. The VP directed the Engineering Group to secure and use whatever resources were required to provide the selected production manager with all requests for engineering support. Furthermore, the designated engineers within the Production Support and Maintenance sections of the Engineering Group would now participate at the "supervisor level" in the existing performance incentive program for the chosen operation's supervisors and operators, which could mean $2,000 to $6,000 per quarter for each engineer involved. A facilitated weekly meeting was held to launch this new relationship. Individually, the production managers were to bring their challenges and specific requests to this meeting, and the assigned engineers would accept these as orders and immediately get to work providing the support requested. Note that these production operations already pay for engineering support, and did all along. Initially the production managers were reluctant to ask for all that they needed, and the facilitation support was instrumental in setting the tone for the new relationship. To their credit, the engineers became immediately supportive and demonstrated both initiative and urgency.

Results:

The first month involved mostly past-due maintenance, but also set in motion plans and changes that would soon greatly impact performance. Still, profitability increased by 7% over the prior month, primarily by reducing scrap production and improving operator efficiencies. The level of cooperation was so high after five weeks that outside facilitation was stopped. After three months, profitability was running 39% higher with the new relationship, primarily because all broken molds were repaired or replaced and now producing.

Findings:

It is not difficult to create unintended social and psychological constraints within people-dependent operations, and they are frequently hidden in plain sight. Today's operations-improvement methods include many well-developed techniques for recognizing "physical" impediments to performance, but do not include equally effective techniques for recognizing "human" impediments. Humaneering technology will provide the missing principles, methods, and tools to substantially enhance operations.

person-role fit, or the alignment of natural motivation and ability with work environment and challenges, shows up consistently in our research as a key to superior performance.

Furthermore, we find that work environment, culture, design, treatment, and support have a much greater impact on a person's work behavior and performance than is reflected in current pre-employment assessment practices. In order to be sufficiently accurate, behavior assessment for the purpose of determining fit must focus on behavior that is in response to the actual work environment. Current practice generally assumes that people behave a certain way regardless of the environment, such that a person's behavior in general, in an interview or in some other setting, is an accurate picture of what the person's behavior will be when in the job. Actual behavior in the new job is not accurately assessed outside of the actual work environment, which means that evidence of behavior from a previous job (i.e., behavioral interview) is less predictive of future work behavior than previously imagined, and is not sufficiently accurate to determine potential person-role fit.

Considering fit even further, our research suggests that an accurate measure of person-role fit may be the single most dependable leading indicator of performance level. *Good fit* yields high performance. *Poor fit* yields low performance. A high performer placed in the wrong job situation will likely result in low performance. Likewise, an individual who has been a poor performer in prior jobs can be a high performer in a job for which she is naturally endowed with motivation and ability. This insight suggests that it is a misstatement to label a person as a high or low performer without linking that label to a particular job situation.

If being a low performer indicates that the person is in a poor-fit job, then management would do well to reconsider its response to low performance. Traditional attempts to have people adapt their natural motivation (e.g., incentives) and ability (e.g., training) to better fit their job can be productive, yet only to a limited extent. As adaptation increases, a person's natural performance potential actually decreases, plus too much adaptation is rarely sustainable. One alternative is to adapt the job to better fit the person, which can be accomplished by increasing discretion and autonomy. Chronic low performers need to be encouraged to re-think the kind of work situations for which they are best suited, in hopes of identifying an occupation for which they are naturally endowed with motivation and ability. Furthermore, our experience demonstrates that issues of persistent poor performance are more effectively and amicably handled when framed as issues of poor person-role fit.

Another challenge facing recruiters is the shortage of skilled talent. This shortage is driven by several factors, including a global shifting of work, insufficient numbers of graduates in required fields, and major changes in the market demand for products and services that in turn impact the growth and decline of occupations. Already, some companies are being forced to reconsider plans for organic growth, and others are planning to take a direct role in the development of the talent required to meet their needs. In the 1980s, to increase organizational flexibility, many companies curtailed investments in workforce and management development, anticipating that their talent needs could be filled easily from the external talent market. However, when most companies took this same approach, the development of many categories of specialized talent virtually disappeared, precipitating a systemic decline in available skilled talent. Today, a bidding war for talent exists for some occupations, and this is during a global recession when overall talent demand is suppressed.

There are no easy answers for dealing with a shortage of skilled talent, and some companies are reluctantly considering a return to comprehensive internal (or joint-venture) initiatives to develop the talent they will need. The good news is that this development initiative need not be a return to the generally slow, expensive, and sometimes ineffective instructional programs of years past. By developing initiatives that focus on the company's specific needs, and capitalizing on advancements in the human sciences, companies can create accelerated development initiatives that assure on-the-job performance. In several field trials, we witnessed development initiatives that were designed so that program participants were productive early and throughout the development initiative, eliminating the typical lost productivity associated with training and development programs.

Still another challenge for recruiting is the desperately low engagement level of employees. Frequently cited Towers Perrin (now Towers Watson) research indicates that employees (on average) are approximately 14% *Highly Engaged*, 62% *Moderately Engaged*, and 24% *Disengaged*. Though frequently considered an operations management problem, this condition could indicate that the wrong people are being hired (i.e., poor fit), thus resulting in low engagement. If these disengaged and moderately engaged

people were in fact high-quality hires, then there is something horribly wrong happening in their jobs or work environment. To the extent that low engagement exists in front-line operations that deal with customers and create value, the implications to performance and productivity are likely substantial. Concentrations of people with low engagement can foster organizations dominated by cynicism, low morale, and intentional slacking. Armed with humaneering, corporate recruiting can contribute to resolving this expensive problem.

Person-role fit is a good starting point in the search for solutions. Most important, the search for solutions should begin with a review of the work (i.e., not with the people involved). Companies exist to accomplish work that creates value, so the work must be considered first. The work system will ultimately dictate what personal motivations and abilities will result in high performance. Many companies take a casual approach to work design, not appreciating the substantial impact design has on the productivity of the people performing the work. If professionals with deep knowledge of the human sciences have not been involved in the work design, there is a high probability that low engagement is attributable (at least in part) to easily correctable work conditions (e.g., support, treatment, fairness). Corporate recruiting can provide helpful leadership by guiding management's attention to the work design and making suggestions consistent with feedback received from incumbents, candidates, and other relevant sources.

Once confident the work design has been optimized to the extent reasonably possible, recruiting can then analyze both the work and the surrounding situation to discern the personal characteristics that would naturally endow candidates with motivation and ability for high performance. Interviewing current high performers can be helpful, yet recruiting should avoid stereotyping the ideal candidate based on the characteristics of current high performers. Keep in mind that it is typical for some high performers to be underemployed, while others will have gamed the work or its measures, will be relying on unacceptable workarounds, or are otherwise not good examples for ideal future hires. Also keep in mind that there can be advantages to identifying candidates based primarily on their having the right natural qualities yet no relevant prior experience. With provisions for appropriate indoctrination and support, such candidates may expect lower starting wages, are more highly motivated to prove themselves, and will be less likely to jump ship in challenging times.

Accurate and Dependable Knowledge

Higher-performance human work has been a focus of the human sciences since the so-called *Hawthorne Studies* in the 1920s. Just as engineers, and most notably Frederick W. Taylor, had studied physical ways of increasing worker productivity, now psychologists and sociologists began discovering how to identify workers suited for specific kinds of work and what conditions and treatment would produce the best work from every person. However, as insights and understanding flowed from the human sciences, managers were increasingly uncomfortable with the unfamiliar advice and more often chose to stick with the engineering principles that had served them well in the past.

The late 1940s and early 1950s were again a formative period in the development of management thinking. The kind of work people performed was beginning to shift from *production* and *logistics* work, with its machine-like standardization and limited worker discretion, to *service* and *innovation* work at which workers were expected to use their discretion to create economic value. At the same time, highly structured work methods were becoming less of a comfortable fit with the values and affluence that many Americans were enjoying in other parts of their lives. It was becoming clear that the management principles first developed by engineers early in the 20th century were not going to be a good match for the newer, more people-dependent forms of work, nor were these compliance-based methods in line with the discretion and autonomy of white-collar work.

The late 1950s began a several-decade-long series of short-term management initiatives (e.g., human relations, management grid, empowerment, one-minute management). These programs were driven by new human-science research findings and dispensed in the form of new training in an attempt to deal with a growing problem of unmotivated workers. Management welcomed "quick fixes" in hopes of appeasing workers and restoring productivity without changing methods. However, this treatment did not address workers' concerns in a substantive way, did not solve industry's productivity problems, and did not pave the way for long-term improvements.

Most of what we know about managing people more effectively is based on more than 80 years of human science. However, the reality is that managers simply don't have the time or temperament to read academic writing or scan more than a few of the hundreds of often-conflicting business books published each year. It would be natural to

question our representation that management does not have or use the human science knowledge available, or to imagine that management doesn't need to because it can rely on HR for such detailed knowledge. For this reason, and not to criticize, we add to our comments two highly respected and informed voices who describe the situation in their words.

First, we hear from Dr. Ed Lawler, a USC professor and leading scholar on human resource management practice, who discusses this subject in a recent peer-reviewed journal article:

"The difference between the academic literature and the practitioner literature on human resource management is an indicator and one cause of the major separation that exists between research and practice in human resource management. A great deal of what passes as 'best practice' in HRM most likely is not. In some cases, there is simply no evidence that validates what are thought to be best practices, while in other cases there is evidence to suggest that what are thought to be best practices are inferior practices. In short, most organizations do not practice evidence-based human resource management. As a result, they often underperform with respect to their key stakeholders: employees, investors, and the community."[i]

We turn next to the voice of Dr. Sara Rynes, a University of Iowa professor, and her colleagues, since managers would logically look to their company's specialists working in the human resources function for guidance on the best methods for designing and managing people-dependent work. They conducted a research study for the Society for Human Resource Management in 2002 to test the HR-relevant human science knowledge of HR professionals. Surveys were sent to a total of 2,600 vice presidents, managers, and directors to ensure that the respondents would have responsibility for HR policy. From the 959 responses, the average respondent had about 14 years' experience in HR and answered correctly 57% of the questions (range of 26% to 86%), which were at a knowledge level similar to SHRM's lowest-level "Professional in Human Resources" (PHR) certification. The authors conclude:

"Our results suggest that there are in fact very large differences across companies in what their HR leaders know about best practices in HR and, furthermore, that the average level of knowledge does not appear to be very impressive. Moreover, it is quite likely that our results presented a 'best case' scenario, given that we sampled the highest-level HR practitioners . . . In addition, the weakest knowledge areas were not limited to obscure, unimportant, or little researched issues. Rather, the biggest gaps between research findings and practitioner beliefs concern some of the most central issues in HR: first, how to choose the best employees and, second, how to effectively motivate them through appropriate goal-setting and effective performance management."[ii]

With the cooperation of Dr. Rynes, a follow-up research study was conducted, directing the same questions to mid-to-high-level managers. The findings indicate that management has a similar level of knowledge.[iii] Additional data from these studies suggest that what both HR leaders and management know is what their companies do, and they generally assume that this is industry best practice.

Additional scholars point out several systemic constraints that stand in the way of managers having reasonable access to helpful human science knowledge. These constraints include:

- Limited professional resources provided to support managers
- Limited training, education, and development of managers
- Silo structure of academic curricula and misaligned objectives of scholars and managers
- Slow and divergent unfolding of science-based knowledge of use to managers
- Fragmented and obscure reporting of scientific research results
- A market flooded with business writing that is well-intended, yet based on limited experience and from which invalid conclusions and applications are promoted persuasively

We suggest that managers can increase the effectiveness and productivity of their operations with a full and accurate understanding of the relevant human sciences. Humaneering will provide this understanding at a level and in a form that is immediately useful. Just as engineering technology enables greater effectiveness in the design, creation, and management of physical roads, buildings and machines, humaneering technology will enable greater effectiveness in the design, creation, and management of human work, organizations, and enterprise.

Reimagining Corporate Recruiting

We approach a future that will require the achievement of maximum results from people. Humaneering technology can play a vital role in supporting management's development of methods that realize the full productive potential of today's workers when performing all kinds of work. Human-science-based humaneering complements physical-science-based engineering, and together these technologies can guide management in the design of operations that maximize performance, productivity, and sustainability. Today's engineering-based management practices are unable to tap much of the potential that is inherent in people. It is humaneering's ability to capitalize on this potential that results in the substantial gains in human performance and productivity. Company-hosted field trials of humaneering confirm this.

Corporate recruiting's presence in the talent market and sensitivity to the workforce of tomorrow, if used by management, can be a source of competitive advantage. Repositioning corporate recruiting for greater influence in talent management is a necessary early step. We are inspired by corporate recruiting's focus on creating economic value through effectiveness with people, plus its early adoption of new technology. By looking to the larger operations-management process that recruiting supports, we see opportunity for corporate recruiting to provide leadership and support to management for its continuous pursuit of increased employee performance and productivity.

Competitive strategy is about being different in ways that create greater value. Despite the comfort and low cost of repetition, standing still has become a greater risk than experimenting on potential improvements. Leading requires us to experiment with new opportunities before competitors even notice them.

Several management systems and tools on which companies base their selection, support, and retention of employees are now opportunities for creating advantage in the escalating war for talent. Many of these were conceived over 60 years ago and no longer serve their purposes well in their current form. Other systems and tools that directly support recruiting are likewise either based on outdated knowledge or have been hopelessly "gamed" and are now ineffective. The continuing use of these methods, while convenient, reduces the effectiveness of management and recruiting.

In that spirit, this article introduces a new chapter in the development and application of humaneering. As the Humaneering Institute's field trial initiative continues to expand since its introduction in 2009, we are increasing access to humaneering and have chosen corporate recruiting for this purpose. Though the Institute's hosting requirements and strict NDA-protected privacy protocols remain in effect, the opportunity has never been greater for innovative and early-adopter companies to test humaneering on the human challenges within their operations.

Notes

[i] Lawler, E. E. (2007). Why HR practices are not evidence-based. *Academy of Management Journal, 50*(3), 1033-1036.

[ii] Rynes, S. L., Colbert, A. E., & Brown, K. G. (2002). HR professionals' beliefs about effective human resource practices: Correspondence between research and practice. *Human Resource Management, 41*(2), 149-174.

[iii] Pepitone, J. S. (2009). Survey of organization managers' knowledge supporting evidence-based human resource management (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses (PQDT) database. (3359833)

James Pepitone is research director, EarlyAccess Field Trials, for the nonprofit Humaneering Institute. He began his career at Owens Corning, recruited from the Industrial Management program at The University of Texas-Austin into the company's expanding salesforce development program. He was also market development manager for ATCO Rubber Products, vice president of sales for Automation Industries (now Honeywell), and general manager for Cybertek Corporation (now CSC). He founded and for 24 years was managing director before he retired from Pepitone Berkshire Piaget Worldwide LLP, an international consulting partnership that pioneered new human-science methods for improving the effectiveness and productivity of people-dependent business operations. He earned a BBA and MBA at The University of Texas-Austin, and an MS in Organization Development and Ed.D. in Organization Change at Pepperdine University. james.pepitone@humaneeringinstitute.org

Robert Wyatt is chairman of the executive board for the nonprofit Humaneering Institute, and has more than 20 years' experience in senior corporate human resources. In the early 1990s he transitioned to executive search with Korn/Ferry International as principal in the Dallas office. He is current managing director of R. S. Wyatt Associates, Inc., a retained executive search and HR consulting firm. He earned an MBA and a Ph.D. in Business Administration from Golden Gate University in San Francisco, where his dissertation focused on employee selection. rw@wyattgroup.us