Developing Critical Thinking Organizations

A Pearson TalentLens White Paper
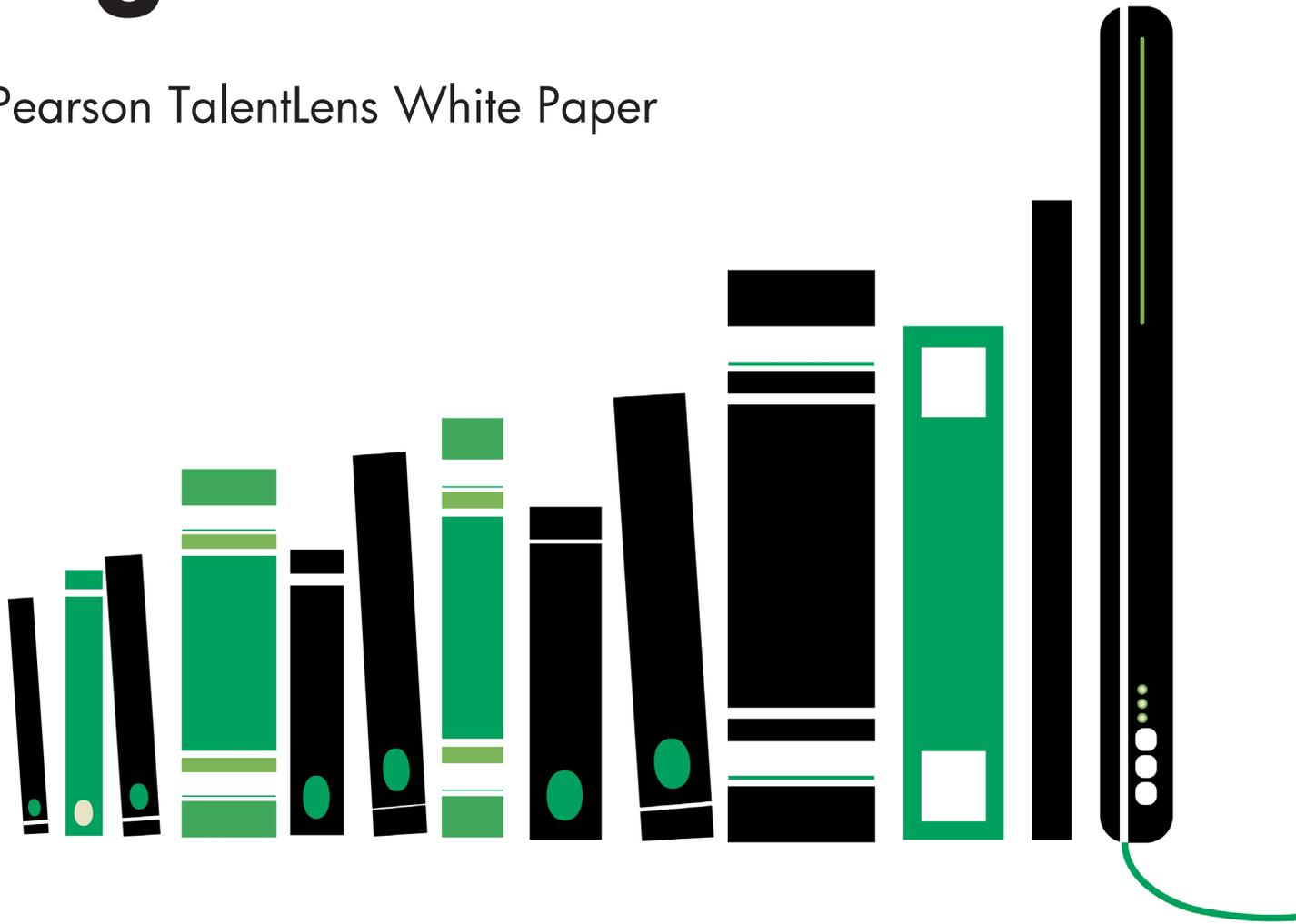
Power HR Forum

Power HR Forum is one of the biggest not for profit association in Indian Power Sector promoted by premier power utilities in India namely BBMB, DVC, NEEPCO, NHPC, NTPC, PFC, POWERGRID, REC, SJVN and THDCIL. The associate members of this forum are DTL, NPCIL, OPTCL, PTCUL and UPCL.

The Forum has been promoted to explore synergistic opportunities in Power Sector for mutual learning and growth. Towards this, the Forum creates several platforms for networking, sharing of expertise, capabilities and best practices to promote better management of Human Resources in Power Sector. The vision of the forum is "Serving Indian Power Sector through Excellence in HR". Apart from regular training, competitions and publications, hallmark of this forum is creating free flow of information and best practices to enrich organization's policies, processes and systems.

Power HR Forum

Bangalore I Delhi I Mumbai I Kolkatta

Power HR Forum Secretariat
At Power Management Institute
Plot No. 5 - 14, Sector - 16A
Noida (U.P.) - 201301 - India

PH: 120 6496 197 | Email: powerhrforum@gmail.com | Website: www.powerhrforum.org

Pearson Talentlens

Pearson TalentLens develops and delivers scientific assessments for employee selection, development, retention and succession planning. With more than 85 years of experience in the employee assessment field, Pearson offers exceptionally reliable and well-researched products such as the Watson-Glaser Critical Thinking Appraisal, Raven's Progressive Matrices, and the Golden Personality Type Profiler. Its clients include half of the Fortune 500, expanding small businesses, and all organizations that make identifying talent and unlocking employee potential a top priority.

Pearson TalentLens

Bangalore I Delhi I Mumbai I Kolkatta

Alpha Centre,
#20 Koramangala, Inner Ring Road,
Bangalore – 560047

PH: 080 4215 3439 | Email: info@talentlens.in | Website: www.talentlens.in

Serving Indian Power Sector
through Excellence in HR

Table of contents

TalentLens

Power HR Forum

Serving Indian Power Sector
through Excellence in HR

Critical Thinking Means Business

Learn to Apply and Develop the NEW # 1 Workplace Skill

By Judy Chartrand, Ph.D., Heather Ishikawa, MA, & Scott Flander

Introduction

When more than 400 senior HR professionals were asked in a survey to name the most important skill their employees will need in the next five years, critical thinking ranked the highest – surpassing innovation or the application of information technology.[1] Such a response reflects how the nature of work – and the skills required – have been changing dramatically.

With globalization and the increased speed of business, employees at every level are facing an increasingly complex flow of information. Work settings are changing rapidly, and employees are moving into new roles, often with limited direction. Employees can no longer rely on others to make key decisions. They often must make them on their own, and quickly. And the decisions have to be good ones. If they fall short, there may be no time to recover.

Good decisions require focusing on the most relevant information, asking the right questions, and separating reliable facts from false assumptions – all elements of critical thinking. And yet too few employees possess these essential skills.

A survey of HR professionals conducted by SHRM and The Conference Board found that a full 70 percent of employees with a high school education were deficient in critical thinking skills. Even among employees with a four-year college education, 9 percent were deficient in critical thinking skills, 63 percent had adequate skills, and only 28 percent were rated excellent critical thinkers.

Many business leaders also come up short. Senior executive-development professionals report that the competency that next-generation leaders lack the most is strategic thinking, which hinges on critical thinking skills.[2] Many next-generation leaders also lack the ability to create a vision or to understand the total enterprise and how the parts work together – both competencies that are closely tied to critical thinking.

What can be done? Once organizations understand the role of critical thinking in everyday decision-making, they can begin to take steps to develop that skill in their leaders and employees. This paper describes some possible solutions, including a model for understanding and developing critical thinking. It also provides trainers with some specific techniques that can jump-start the process.

Senior executive-development professionals report that the competency that next-generation leaders lack the most is strategic thinking, which hinges on critical thinking skills.

TalentLens

Too Little Critical Thinking = Big Problems

The U.S. Department of Labor has identified critical thinking as the raw material of a number of key workplace skills, such as problem solving, decision making, organizational planning and risk management. There is no lack of examples of what happens when an absence of critical thinking in business cascades into a complete systems failure.

In 2007, Circuit City fired 3,400 of its highest paid store employees, saying it needed to make the cuts to remain competitive with Best Buy and other electronics retailers. The employees, the company said in a statement, had previously been given raises by managers that paid them "above the market-based salary range for their role," and would be replaced by workers making less money.

The move resulted in a storm of public reaction. News stories quoted angry consumers who vowed to boycott Circuit City for what they considered shabby treatment of successful employees. Sales of big-ticket items – such as flat-panel televisions – dropped off suddenly and sharply, forcing the company to revise its revenue estimates downward. Industry analysts blamed the poor sales on the job cuts, saying that when consumers buy expensive, complicated electronics, they expect the sales staff to be experienced and knowledgeable. Shoppers likely were reluctant to take a chance at Circuit City, the analysts said.[3] The company downplayed the possibility that reduced sales were related to the firings, saying that only two or three salespeople per store, on average, were cut.

While it is impossible to know exactly what went on in Circuit City's executive offices, it is clear the company miscalculated on several fronts. It failed to fully consider what the public reaction might be, not only to the firings, but to the lack of experienced staff on the sales floor. It seemed the company was so focused on the bottom line, it failed to look at the larger picture. These are signs of a breakdown in critical thinking.

A window into the company's thought process can be found in its suggestion that because few employees per store were fired, the drop in sales of expensive items was probably not related. But how many would-be shoppers did encounter inexperienced sales staff, and walked out emptyhanded? And how many more simply stayed away from Circuit City altogether because they had seen the news reports, and did not expect to find knowledgeable employees? Public perception no doubt played an important role in the entire affair, something the company – even in the face of disaster – apparently failed to comprehend. The firings may even have contributed to the company's eventual demise. Circuit City continued to lose ground in the electronics wars, and could not survive the recession. The chain liquidated all of its stores in 2008 and 2009.

A failure in critical thinking may have also sabotaged an ambitious plan by UK-based Tesco, the world's third-largest retailer, to blanket the West Coast of the U.S. with a chain of small grocery stores focusing on fresh foods. Prior to opening its first Fresh & Easy stores, Tesco conducted an extraordinary level of market research, with Tesco executives living in the homes of American consumers to observe their eating and shopping habits.

However, the Fresh & Easy concept failed to catch fire, and expansion plans for the chain were scaled back. Tim Mason, the head of Tesco's U.S. business, said that despite the intensive market research, the company failed to realize that Americans would not be content with Fresh & Easy's "everyday-low-prices" strategy, and wanted to see coupons and other special offers.

A comment Mason made later to The Times of London was particularly revealing of the company's thought process. "There's less loyalty in the American market," Mason said. "A Brit has to hear it a few times before [they] accept that people make up their minds each week when they check out the special offers." 4 Mason was suggesting that the marketing executives had been told of the importance of special offers, but the information didn't register with them because it didn't correspond to the way British people shop. In other words, the executives apparently were unable to clearly evaluate evidence because of preconceived notions – a classic example of a lack of critical thinking.

Serving Indian Power Sector
through Excellence in HR

Critical Thinking in the Workplace

Research conducted in recent years by Pearson, as well as by a variety of independent academics, has shown that people who score well on critical thinking assessment are also rated by their supervisors as having:

- Good analysis and problem-solving skills.
- Good judgment and decision-making.
- Good overall job performance.
- The ability to evaluate the quality of information presented.
- Creativity.
- Job knowledge.
- The potential to move up within the organization.

Because it is often difficult to discern such critical thinking skills through a resume or job interview, many organizations are turning to assessments to help them evaluate candidates. One of the most widely used assessments in this area is the Watson-Glaser Critical Thinking Appraisal, from Pearson TalentLens. The Watson-Glaser offers a hard-skills appraisal, and is suited for people in professional and managerial positions.

Perhaps not surprisingly, independent research has also found that the higher up the ladder a position is, the more essential critical thinking becomes. People who are successful in these positions tend to be able to learn quickly, process information accurately, and are able to apply it to decision-making. One of the most well-established research findings in industrial psychology is that cognitive ability is directly related to performance in all jobs[5]. Critical thinking, one type of cognitive ability, is of particular importance where sophisticated decision-making and judgment are required.

It is not uncommon for organizations to ignore such research findings when they are engaged in succession planning or top-level executive searches. Organizations often assume that everyone at the highest corporate levels is bright and a "good thinker," so they don't assess their candidates' critical thinking capabilities. However, a 2009 study by Ones and Dilchert[6] found that there is variability in critical thinking ability within groups of executives (as well as among supervisors and managers). Although executives generally did perform better on critical thinking tests when compared with other groups, there was a wide range of higher and lower scores. Simply put, the research found that some top executives are better at critical thinking than others – and so are likely to be more successful.

It is important to note that research has also found a positive correlation between certain personality characteristics and job success. Consequently, organizations that include both critical thinking and personality in their battery of assessments tend to get a more comprehensive view of a candidate than do organizations that use either personality or critical thinking assessments alone.

Organizations often assume that everyone at the highest corporate levels is bright and a "good thinker," so they don't assess their candidates' critical thinking abilities.

Serving Indian Power Sector through Excellence in HR

How Critical Thinking Works: Introduction to the RED Model

Keys to **CRITICAL THINKING**

Recognize Assumptions

Evaluate Arguments

Draw Conclusions

Fortunately, critical thinking can be taught. Pearson has developed the following RED Model – Recognize Assumptions, Evaluate Arguments, Draw Conclusions – as a way to view and apply critical thinking principles when faced with a decision. This model is particularly helpful in critical-thinking training programs.

Recognize Assumptions. This is the ability to separate fact from opinion. It is deceptively easy to listen to a comment or presentation and assume the information presented is true even though no evidence was given to back it up. Perhaps the speaker is particularly credible or trustworthy, or the information makes sense or matches our own view. We just don't question it. Noticing and questioning assumptions helps to reveal information gaps or unfounded logic. Taking it a step further, when we examine assumptions through the eyes of different people (e.g., the viewpoint of different stakeholders), the end result is a richer perspective on a topic.

Evaluate Arguments. It is difficult to suspend judgment and systematically walk through various arguments and information with the impartiality of a Sherlock Holmes. The art of evaluating arguments entails analyzing information objectively and accurately, questioning the quality of supporting evidence, and understanding how emotion influences the situation. Common barriers include confirmation bias, which is the tendency to seek out and agree with information that is consistent with you own point of view, or allowing emotions – yours or others – to get in the way of objective evaluation. People may quickly come to a conclusion simply to avoid conflict. Being able to remain objective and sort through the validity of different positions helps people draw more accurate conclusions.

Draw Conclusions. People who possess this skill are able to bring diverse information together to arrive at conclusions that logically follow from the available evidence, and they do not inappropriately generalize beyond the evidence. Furthermore, they will change their position when the evidence warrants doing so. They are often characterized as having "good judgment" because they typically arrive at a quality decision.

Each of these critical thinking skills fits together in a process that is both fluid and sequential. When presented with information, people typically alternate between recognizing assumptions and evaluating arguments. Critical thinking is sequential in that recognizing faulty assumptions or weak arguments improves the likelihood of reaching an appropriate conclusion.

Although this process is fluid, it is helpful to focus on each of the RED skills individually when practicing skill development. With concentrated practice over time, typically several months, critical thinking skills can be significantly increased.

TalentLens

Serving Indian Power Sector through Excellence in HR

Using the RED Model in Decision Making: A Case Study

Making Dentists Feel Comfortable During the Purchasing Process

A company that sold medical equipment directly to dentists had what appeared to be a minor, easy-to-solve problem. The company's sales representatives reported that they were having difficulty selling new equipment because the dentists had a number of technical questions that went beyond the reps' knowledge. The sales staff requested that this technical information be put on the company's Web site, so that it could be accessed by the dentists.

This seemed like a very reasonable request. Company executives were familiar with surveys that said dentists liked to search online for the latest information and developments in their field. The executives checked with company customer-service reps, who also reported that dentists were asking a lot of technical questions about the new equipment. After studying the issue, the company redesigned its Web site, providing a wealth of technical information about its equipment.

But the changes had no effect whatsoever. Sales of the new equipment remained sluggish. Dentists continued to ask sales representatives for additional technical information – even after they were referred to the revamped Web site.

To understand what was happening, several company executives met informally with dentists whom they knew were in the market for new equipment. Through these conversations, the executives learned that the dentists didn't feel comfortable during the purchasing process. What they really wanted, though they didn't explicitly ask for it, was to talk to someone at the company – a peer – who could walk with them through the entire process, answering their questions honestly and knowledgably. Essentially, they didn't want a salesperson or a Web site – they wanted a coach.

By examining the RED Model, it can be seen where the company went wrong:

Recognize Assumptions: The executives had assumed the sales staff had an accurate handle on the situation. But the executives had never asked the reps how deeply they had probed into the customers' concerns.

Evaluate Arguments: The executives later recalled that during a meeting on the issue, a manager had recommended hiring a retired, highly regarded dentist who could help the customers on a peer-to-peer level. The suggestion had been quickly dismissed because of the cost. Others at the meeting noted that updating the Web site would be far cheaper. The executives also later remembered that while surveys did show that dentists like to get information online, the surveys also revealed that dentists don't fully trust the information unless they can verify it with someone they trust – such as a peer. The executives realized that they had chosen to focus on the portion of the research that suggested a cheaper solution.

Draw Conclusions: The executives had taken the evidence they possessed – the dentists' technical questions – at face value, without considering that people do not always clearly ask for what they want.

Had the company executives recognized their operating assumptions – and questioned them one by one; had they fairly evaluated alternative arguments and points of view; and had they dispassionately analyzed the information available before drawing any conclusions; they may have been able to quickly identify and address the underlying issue. As is often the case, there wasn't an isolated breakdown in critical thinking here. There was a systemic, cascading failure.

By examining the RED Model, it can be seen where the company went wrong.

TalentLens

Power HR Forum

For Trainers - Developing Critical Thinkers and Problem Solvers Using the RED Model: A Sample Training Program

If companies are to remain competitive in today's business environment, they need to incorporate critical thinking into all aspects of their organization, including their training programs.

Here's how an effective critical thinking training program could be structured:

1. Educate employees on the key components of critical thinking (the RED model), making clear the essential role of each component within the workplace.

2. Demonstrate how the RED model can be used to improve understanding of the topic at hand. A few approaches to accomplish this include:
   a) Ask the employee to provide an actual problem that he or she is facing in the workplace. The employee leverages the RED model to identify any assumptions that are inhibiting the decision-making process. The model is also used to identify other viewpoints/key stakeholders that need to be included, and to evaluate the various arguments and viewpoints.
   b) Provide a sample case study that students can work through with a focus on applying the RED model.

3. Encourage trainers to incorporate the RED model into their overall curriculum.

4. Reinforce critical thinking post-training by encouraging different viewpoints, raising challenging questions and playing the devil's advocate.

While working through the problem or case study, ask employees these **key questions.**

Recognize Assumptions – Separating fact from opinion.

- What is the key issue/problem that you are trying to resolve?
- What information do you have about this issue?
- What are your ideas and assumptions that support your strategy or plan?
- Is there solid evidence to support those assumptions, and what might be some gaps in your reasoning?
- Who are the key stakeholders and what are their viewpoints?
- What other ideas should be explored, and what else do you need to know?

Evaluate Arguments – Analyzing information objectively and accurately, questioning the quality of supporting evidence, and understanding how emotion influences the situation.

- What are the pros and cons of the solution that you are proposing?
- What are your biases? Is there someone who has a different opinion than yours that you could run your ideas by?

- What impact will your decision have on others?
- How will you handle this?
- Who would disagree with your proposed solution? What is the rationale that supports their viewpoint?
- What key points, models and/or perspectives do you need to keep in mind as you evaluate the options?
- What will be the impact of your decision?

Draw Conclusions – Bringing diverse information together to arrive at conclusions that logically follow from the available evidence.

- After evaluating all of the facts, what is the best possible conclusion?
- What specific evidence is driving your conclusion?
- Is there new evidence that would impact your decision?

Conclusion

Critical thinking is the lifeblood of the most essential workplace skills, including problem solving, decision making, good judgment and sound analysis. Organizations that can attract, retain and develop the best critical thinkers have a significant and measurable competitive advantage in the business world.

Yet business suffers from a severe shortage of critical thinkers. Too few employees come to their jobs with these skills, and too few have the opportunity to develop them in the workplace. The good news, however, is that critical thinking can be taught, and applied directly to on-the-job problems and decisions. The easy-to-use RED model is a breakthrough in approaching what until now has been a mostly abstract and elusive concept. The RED model lays out a path for understanding how critical thinking works, and for developing each of the essential skills.

The return on investment for critical thinking training tends to be extremely high. One company reported 17x ROI. And as a whole, participants in an onsite Critical Thinking Boot Camp workshop reported 74% of employees actually applying the new skills. Other research has shown that when training moves a $60,000-a-year manager or professional from average to superior, the ROI is $28,000 annually. At that rate, training 25 managers or professionals in critical thinking would yield $720,000 a year.

At the same time, tools are available for organizations to assess and develop critical thinking skills in prospective job candidates, high potential employees, and those being considered in succession planning. The value of this cannot be overestimated.

Critical thinking, perhaps more than any other business skill set, can make the difference between success and failure. Fortunately, these skills are not out of reach – they are readily available to employees at all levels. Once gained, critical thinking skills last a lifetime, and become a powerful asset for organizations seeking a competitive edge.

References

[1] *Are They Really Ready to Work? Employers Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century US Workforce (2006). Study conducted by The Conference Board, Partnership for 21st Century Skills, Corporate Voices for Working Families, and the Society for Human Resource Management.*

[2] *Hagemann, B. and Chartrand, J.M. (2009). 2009 Trends in Executive development: A Benchmark Report (Technical Report). Oklahoma City: Executive Development Associates.*

[3] *"Circuit City's Job Cuts Backfiring, Analysts Say," Washington Post, May 2, 2007.*

[4] *"Tesco Admits: We Got it Wrong in the US," The Times of London, February 22, 2009*

[5] *Schmidt, F. L. and Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. Psychological Bulletin, 124 (2), 262-274.*

[6] *Ones, D.S. and Dilchert, S. (2009) How special are executives? How special should executive selection be? Observations and recommendations. Industrial and Organizational Psychology, 2 (2009), 163–170.*

TalentLens

Power HR Forum

Serving Indian Power Sector
through Excellence in HR
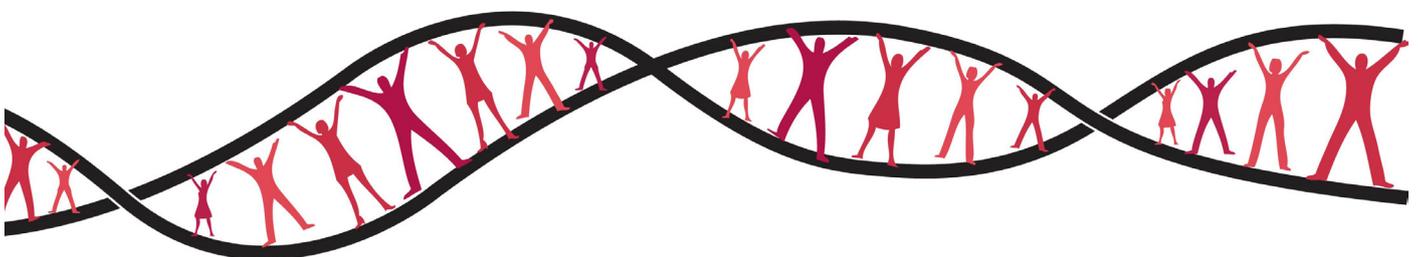
The Difference Between Good Leaders and Great Leaders

How to Assess for "Critical Thinkers" in Hiring and Development

By Judy Chartrand, Ph.D. and Mark Rose, Ph.D.

Introduction

The characteristics of effective leadership have been widely described in popular literature, from Bennis' guiding vision to effective virtues. Yet the question remains: What are the most important qualities a company should consider when selecting an employee to lead a team, division, and corporation? Recently, personality and related concepts, such as emotional intelligence, have come to the forefront of this discussion.

The requirements for success in business today, such as innovation or the ability to de al with ambiguity, appear to be driven by personality. However, personality is only part of the picture. Cognitive ability is still the most potent predictor of occupational attainment and job performance (Schmidt & Hunter, 2004). In his Harvard Business Review article, "Hiring for Smarts," Justin Menkes pinpointed critical thinking as the foundation of executive intelligence. Good critical thinkers possess a core set of cognitive thinking skills, as well as a disposition toward critical thinking. Coveted business competencies, such as strategic thinking, innovation, or dealing with ambiguity, are built on critical thinking skills and refined by disposition. Companies that do not include critical thinking as part of their management selection or succession battery are missing information that can help differentiate good leaders from great leaders.

TalentLens

Critical Thinking Defined

A business leader who thinks clearly, sorts through the clutter, and anticipates well is using his or her critical thinking skills. At a more formal level, critical thinking can be defined by six key skills that work in conjunction. Dispositional characteristics are also relevant, and include being inquisitive, judicious, truth-seeking, confident in reasoning, open-minded, analytical, and systematic (Facione, 1990).

In his article, Menkes dierentiates the critical thinking of executive intelligence from broader cognitive skills. Business differentiates can be bright and well-educated, but still not possess superior critical thinking skills. After reviewing the literature on essential components of leadership and analyzing star performers, Menkes identified the core components of critical thinking as the ability to distinguish primary goals from less relevant concerns, anticipate probable outcomes, and recognize peoples' underlying agendas. Companies that accurately assess these components are more likely to select leaders who will excel in the real-world business arena.

Companies that do not include critical thinking as part of their management selection or succession battery are missing information that can help differentiate good leaders from great leaders.

Cognitive ability is still the most potent predictor of occupational attainment and job performance

(Schmidt & Hunter, 2004).

The Six Core Critical Thinking Skills

Interpretation—comprehending the meaning and significance of a wide variety of situations, data or events. It is the ability to categorize, determine significance, and clarify meaning. In practice, it is the person who recognizes a problem or accurately reads someone's nonverbal cues to distill meaning.

Analysis—identifying the relationships from information or opinion. It is the ability to effectively examine ideas and arguments. In effectively, it is the executive who differentiates ideas that define a successful strategic plan from those that don't.

Evaluation—assessing the credibility of statements and the logical strength of the inferential relationships among statements. It is recognizing credibility or judging if an argument's conclusions follow from its premise; it is recognizing relevance. In practice, it is the leader who effectively weighs the alternatives that lead to deferential profitability.

Inference—identifying information needed to draw reasonable conclusions. It is gathering evidence, weighing alternatives, and drawing conclusions. In practice, it is the manager who effectively determines which of several potential conclusions is most strongly supported by the evidence at hand.

Explanation—stating one's position or justifying a position based on evidence, criteria, or contextual considerations. It is cogent arguments and the use of insightful criteria to support a judgment. In practice, it is the employee who develops a proposal backed by solid data and logic.

Self-regulation—monitoring one's cognitive activities by questioning, validating, or correcting one's reasoning. It is self-

examination and self-correction. In practice, it is the professional who dissects personal biases and opinions from important information prior to making a decision.– monitoring one's cognitive activities by questioning, validating, or correcting one's reasoning. It is self-examination and self-correction. In practice, it is the professional who dissects personal biases and opinions from important information prior to making a decision.

Based on a consensus definition of critical thinking by a panel of international experts (Facione,1990).

Serving Indian Power Sector
through Excellence in HR
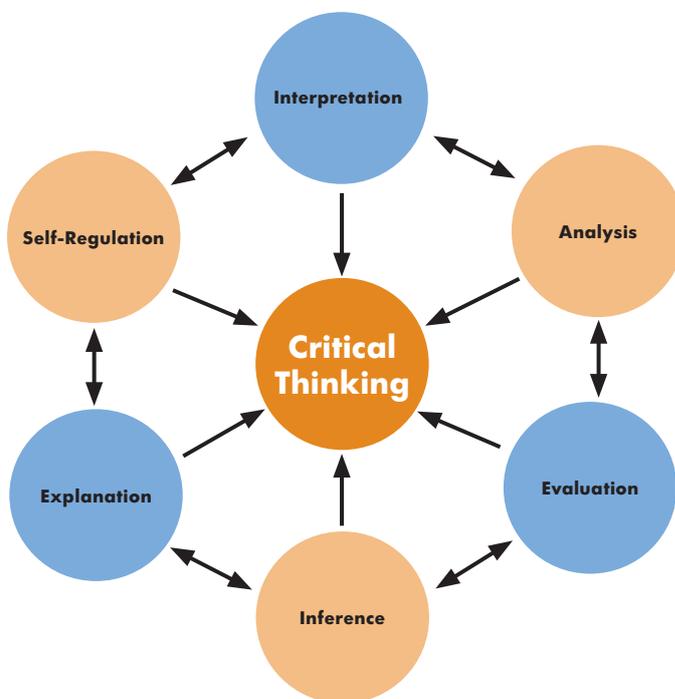
Assessment of Critical Thinking

It is easy to recognize good critical thinkers after they become successful. Jack Welch's transformation of G E is a classic example of how superior critical thinking skills can impact an organization. Warren Buffett's unconventional investment strategies, Rupert Murdoch's acquisition of new technology, Boblger's profit-boosting peacemaking-all demonstrate skills necessary for success. A more difficult task is early identification of good critical thinkers. An impressive resume or an MBA from a difficult school is no guarantee that a candidate will possess those key critical thinking skills that positively impact organizational strategy and decision making.

Human resource professionals assess critical thinking skills using a variety of methods, including psychometric tests, assessment center simulations, and structured interviews.

Psychometric tests are the most practical, timely, and cost-effective method of critical thinking assessment due to their ease of use and quick turnaround. *The Watson-Glaser Critical Thinking Appraisal* is one of the most widely used and respected psychometric tests in the market, offering insight into how effectively someone draws conclusions, recognizes assumptions, analyzes and interprets information, and evaluates arguments. A candidate's scores can easily be compared to norms across different occupations (e.g., production, sales, customer service, managers, executives) and industries, providing an objective benchmark of their critical thinking skills. Therefore, companies can evaluate candidates compared with their peer group and industry.

Personnel Decisions International (PDI), one of the world's leading human resources consulting firms, has used the Watson-Glaser for decades to help in assessing the potential and readiness of candidates for hire and promotion into major corporations. "We have administered this assessment to thousands of leaders at all levels and have found this to be a very useful and robust measure of cognitive ability," says Dave Heine, Executive Vice President, PDI. "The results are easy to interpret for participants and our research has shown it to add value in predicting successful performance."

As noted previously, a disposition toward critical thinking (e.g., inquisitiveness, open-mindedness, systematic style) is relevant to understanding how critical thinking is expressed in the workplace. Personality tests are excellent tools for assessing dispositional behaviors, and are often used in conjunction with ability assessments like the Watson-Glaser.

> Psychometric tests are the most practical, timely, and cost-effective method of critical thinking assessment due to their ease of use and quick turnaround.

How Critical Thinking and Personality Tools Assess Leadership Effectiveness

A mid-sized manufacturing company was seeking a director for a business unit that needed to address the following challenges:

1. Improve global focus and the capacity to do business worldwide

2. Address declining profits for a key product line

3. Develop talent and build bench strength

4. Enhance customer relationship management and quality assurance processes

Strong critical thinking skills are essential for effectively handling each of these challenges. For example, increasing global focus involves evaluating readiness of existing staff to operate internationally, understanding how international laws and customs affect business practices, and anticipating competitor reactions. Figure 1 shows a portion of the competency model the company created for this position. The model ties the measurement of critical thinking directly to two key competencies required to address the business unit's challenges.

As shown, the assessments used to evaluate Decision Making included the Watson Glaser, three scales from th e *Workplace personality Inventory* (Adaptability/Flexibility, Stress Tolerance and Leadership Orientation), and a behavioral interview question focused on making decisions under conditions of uncertainty. The personality scales were used to assess "comfort with ambiguity" and the "willingness to take charge and take action." Strategic Thinking was measured by combining scores on the Watson Glaser, two scales from the Workplace Personality Inventory (Innovation and Leadership Orientation), the Raven's Advanced Progressive Matrices, and a behavioral interview question focused on identifying strategic opportunities. The Raven's measures conceptual and abstract reasoning. The personality scales were used to assess "openness to new ideas and opportunities" and "willingness to take charge and take action."

TalentLens

Power HR Forum

Serving Indian Power Sector
through Excellence in HR

Figure 2. Division Director Test Battery Example

Criterion Dimension (Supervisory Ratings of Job Performance Behaviors)

Division Director Test Battery			
Competencies	**Critical Thinking**	**Relevant Personality Scales**	**Behavioral Interview**
Decision Making (Making sound decisions under conditions of ambiguity and time pressure)	**Watson-Glaser (e.g., to** evaluate skill in drawing conclusions based on the facts at hand)	32.8	5.8
Strategic Thinking (Skill in se eing the "big picture" and planning accordingly)	**Watson-Glaser** (e.g., to evaluate skill in recognizing assumptions that must be met for plans to succe ed) **Raven's** (conceptual and abstract reasoning)	**Innovation** **Leadership Orientation** (Workplace Personality Inventory)	2.4

As Figure 1 demonstrates, critical thinking and related factors for leadership success can be assessed objectively and effectively, providing an advantage for hiring managers to make strategic hires-and make the most of their current employee pools as well.

The Role of Critical Thinking in Talent Management

Many companies have incorporated critical thinking as an important talent differentiator in their employee selection, high potential, and succession planning programs. These applications are straightforward: companies use a tool, such as the Watson-Glaser, to give them an objective evaluation of an employee's critical thinking proficiency. When individual scores are tallied across a te am, division, or corporation, the human resource department has a scorecard of group strengths and training needs. The most common applications have been for the roles of manager, executive, and individual contributor.

Critical thinking as a differentiator should play a prominent role in both the selection and the development of supervisors, managers, executives, and individual contributors. Leaders who consistently make wise decisions or see opportunities that others miss are the leaders that every company needs. Critical thinking skills and associated dispositional qualities can be evaluated quickly and cost-effectively and the small investment of time and money yields high dividends. The difference between critical thinkers and their counterparts is often a million-dollar difference.

Can You Develop Critical Thinkers?

A frequent customer question is whether we view critical thinking as "developable." In a 2003 report from the University of Tennessee, R.L. Williams reported that critical thinking skills can be developed.*The pivotal question is, when is it more advantageous to select versus develop critical thinkers? The answer depends on the company's time line. Critical thinking skills are the basic building blocks for higher level competencies, such as strategic thinking. Being able to proficiently exercise higher level competencies requires concerted effort and time. When a company needs to quickly strengthen critical thinking within a position or division, selection yields a higher probability of success. However, when a company sets a long term objective to enhance critical thinking skills (say over a three-year period), there is sufficient time to build skills. Because competencies like strategic planning are highly sought after and in short supply, a longer-term organic strategy is often necessary. The American Management Association (amanet.org) offers several seminars for companies interested in improving critical thinking skills for current employees.

TalentLens

Power HR Forum

References

Facione, P. A. (1990).
Critical Thinking: A statement of expert consensus for the purposes of educational assessment and instruction. Milbra e, CA: The California Academic Press, 19.

Menkes, J. (2005).
Hiring for Smarts. Harvard Business Review, 83, November, 1-10.

Schmidt, F. L. & Hunter, J. (2004).
General mental ability in the world of work: Occupational attainment and job performance. Journal of Personality and Social Psychology, 86, 162-173.

* Williams, R.L., (2003).
Critical thinking as a predictor and outcome measure in a large undergraduate educational psychology course. (report No.