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Achieving Breakthrough Returns On Human Capital

By adopting new innovative solutions that utilize science and technology, human resource professionals have an opportunity to bring revolutionary change to this critical asset.

By Dr. Pawan Singh and Dr. Mohamed Latib, PeriscopeIQ

Look at any company's mission statement and you'll likely see a phrase referring to its employees as its most important asset. Too often that statement is "corporate-speak" with little management action attached to it. Still it holds a great deal of truth.

Cynics often point out that despite management assertions about employees as assets or human capital, the first response to market downturns is to lay off employees. This response, it seems, stems from a misunderstanding of the meaning of human capital, or more particularly the meaning of "capital." Capital has a specific meaning in the accounting world of balance sheets and income statements. Capital assets are recorded on balance sheets and are depreciated as an expense on the income statement. Financial capital earns a return, which is shown on the income statement. Human capital, however, does not neatly match up with these simple measures that are understood by most executives.

Are Employees Really Human Capital?

Economists offer a different definition. For them, capital assets are assets only if they provide returns over a certain period. The true value of such an asset is the present value of those returns. Employees provide returns in two ways. First, they add value to the organization's offerings through labor. Second, employees create intangible assets such as patents, relationship capital and knowledge capital, to name just a few.

The questions that arise are: How does one measure human capital? How is it accounted for in financial statements? There are no easy answers to this question. In fact there is much confusion about measurement of human capital. Current GAAP regulations require employee costs to be expensed as incurred. This accounting treatment is similar to expensing the cost of a client lunch. If employees are considered an expense, how do you prove that employees are also a valuable capital asset?

Accounting methods exist that enable us to estimate the value of human capital. Many capital assets are also expensed. If capitalized expenses for a company are 10 percent of employee

expenses, and if one can assume that both types of assets are likely to produce similar returns, then the value of human capital would be equivalent to 10 times the value of capital assets. True mathematical modeling of human capital is quite a bit more complex than this formulation because of exit-at-will issues and input-response unpredictability.

The economic value of human capital can be measured more directly. One such measure is the adjusted difference between an organization's market and book values. The adjustments are applied to take out the value of marketable intangible assets such as customer relationships, patents, etc.

Equation 1 mathematically defines human capital in an organization:

$$HC = MV - FC - CA - RC - SC$$

(Equation 1)

where HC = human capital; MV = organization's market value; FC = net financial capital; CA = nonfinancial capital assets; RC = relationship capital; and SC = structural capital, are all valued at market prices. This "mark-to-market" approach defines capital in its true sense of what buyers in a free market would be willing to pay for the asset.

In this approach, many of the terms in Equation 1 are well-known, such as market value, financial capital and capital asset values. A problem arises with the valuation of intangible assets such as relationship capital (the market value of customer and supplier relationships) and structural capital (the market value of patents, brand equity, etc.).

The market value of intangible assets is usually uncertain, but estimates of these values can be derived from mathematical models such as those of brand equity, and from pure transactions like purchases of patents and customer lists. (The reason pure intangible asset transactions are so rare is that without their associated human capital, the value of intangible assets falls precipitously.

The market value of intangible assets also varies from one industry type to another, limiting their marketability.)

Without going deep into mathematical models and detailed valuations, one way to provide an easy numerical estimate of human capital is by using Equation 2:

Dr. Pawan Singh, co-founder and chief architect at PeriscopeIQ, has transformed businesses into industry leaders through business and technical innovation. He pioneered a new software genre – knowledge-embedded solutions – combining advanced algorithms with business and scientific principles.

Dr. Mohamed Latib, co-founder and vice president of PeriscopeIQ and Vice President for Strategic Development at DeSales University, leads PeriscopeIQ's Organizational Development (OD) and Performance Management practices. He was among the pioneers of the 360-degree performance system and has served as an OD consultant to government and business organizations.

$$HC = k MV$$

(Equation 2)

where k is the human capital ratio factor. Typical values of k range from 0.2 to 0.5. Lower values in this range apply for established companies in traditional businesses such as GM and Citigroup, and higher values apply for knowledge-based companies such as Cisco and Microsoft. In actuality, the value of k can range from 0.0 (i.e., only physical assets such as real estate are acquired and the compa-

markets were rudimentary, and there were limited financial investment options. Financial capital management was mostly an art, and aside from a few experts preaching various techniques, real knowledge was limited. Returns on invested capital varied tremendously – some managers did very well and others went bankrupt. Successful managers attributed their success to personal skills and intuition.

What made a real difference in performance then was captive knowledge. Those who understood industries and markets



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ny is dissolved) to 1.0 (i.e., a venture capitalist's purchase of a start-up in which only "people and ideas" are purchased). In some extreme cases, k can even have a negative value when unproductive labor is entrenched through long-term labor contracts or governmental regulations – the business would actually be more valuable, not less, without these encumbered employees. Of course, market values vary daily, so it is best to use a quarterly or yearly average value. Whatever value of k one chooses, or whatever other models or yardsticks one adopts, there should be no argument that typically the value of human capital is enormous.

Human Capital Management Paradox

If the value of human capital is so enormous, potentially running into billions of dollars, why is it that many CEOs and HR executives pay so little attention to it? This is the human capital management paradox. Employees see it clearly, wondering why their true value isn't being recognized. Corporate and HR executives realize the importance of people, but are at a loss about how to best manage such capital. Management efforts are limited to improving transactional efficiencies by introducing new software systems or through outsourcing, or enhancing development programs by increasing training budgets. Corporate executives feel more comfortable optimizing financial capital returns, through investments, merger and acquisition decisions.

It is beneficial to speak of "optimizing human capital returns" rather than "managing human capital." Managing human capital evokes managing people in the traditional hierarchical sense. Consistent with the concept of the manager's duty to a corporation – maximizing shareholders' wealth – the manager of any capital asset should have but one goal: to optimize the return from that asset.

Financial vs. Human Capital Management

In this vacuum of knowledge about how to manage employees as a capital asset, HR managers can learn much from the history of financial capital management. Seventy-five years ago financial

through special or acquired knowledge did extremely well, while those speculating without knowledge often went bankrupt.

Human capital management has not yet experienced the revolutionary changes brought about in the financial markets by the current knowledge-driven environment. There are, however, some instructive parallels that can be drawn between the human capital market of today and the financial market of the past. The human capital market remains inefficient. HR managers manage by local skills and gut feel. Real knowledge about employees' needs and their drive to excel is skimpy and often stale. Scientific research in this space is limited, and if present at all, it is often shoddy. Return on capital varies widely and, just as it was in past financial markets, the difference is often attributed to special knowledge or personal skills.

Human capital has special characteristics that make it very different from capital assets and financial markets. The recognition that human capital can "walk out on its own two feet" is obviously not true for other forms of capital. But even here the parallels between financial and human capital markets are surprising. Faced with the prospect that their high returns can disappear instantly in sudden market downturns caused by unexpected external events, financial managers use a wide range of contracts or ladders to protect returns. Smart human capital managers use executive contracts and compensation vesting strategies to protect their valuable assets.

Golden Age of Human Capital Management

Human capital management is entering a golden age. The ratio of the value of human capital to market value (factor k) keeps increasing as knowledge workers create more and more of a company's value. Google, whose total market value of \$51 billion consists almost entirely of human capital, is an excellent example. The supply and demand of human capital is becoming more transparent and efficient with the popularity of job sites like Monster.com and CareerBuilder.com. With online assessment technologies easily

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available, employees' needs can be known in real time, and appropriate resources deployed quickly and efficiently.

Still, very few organizations are taking a lead in generating captive knowledge and earning outsized returns on human capital. Most organizations either take a transactional or managerial view of human capital (hiring, compensation, training, performance management, etc.) or follow practices that jump from one fad to another, without delivering consistent returns. In inefficient markets, captive knowledge is the key to getting outsized returns.

Successful organizations focus on building valid, robust storehouses of captive knowledge that can be applied with confidence in making decisions to optimize human capital returns. Captive knowledge consists of skills and knowledge about internal human capital markets (e.g., matching strategic job requirements to an employee's competencies and needs), as well as external human capital markets (e.g., talent availability and pricing), although with considerably more emphasis on internal skills.

Science and Human Capital

The lack of use of scientific principles in human capital management is quite appalling. Clearly it is about people, and people are not as predictable as robots. Still, behavioral science and scientific methodologies can provide troves of knowledge, thereby reducing unpredictability and risk in managing human capital.

Large organizations often have huge departments for process R&D, product R&D and even planning R&D, but the concept of human capital R&D (i.e., understanding how to optimize their employees within their own cultural constraints) is virtually nonexistent.

Once again the lessons from financial markets can be valuable. Only 30 years ago, investment banks and financial institutions relied almost exclusively on relationships based on soft skills. Today thousands of math and science PhDs build financial products using scientific theories, with more than a bit of behavioral science mixed in.

Road Map to Breakthrough Returns

Human capital markets, with some revolutionary thinking, can generate the kind of returns rarely seen in capital markets, and HR managers have the potential to be the new champions of the business world. Assuming managers have similar opportunities and skills for traditional HR functions such as training and development, recruitment, performance management and access to enterprise-level HR management systems, breakthrough performance can be achieved by individuals using the following proposed paradigm – composed of five guiding principles – as a road map for getting the most out of human capital.

1. Transactional Efficiencies to Strategic Focus

Current HR is dominated by transactional processes such as payroll, benefits or regulatory compliance. Significant efficiencies are still available from streamlining these processes even though most large organizations have made substantial inroads. A model that is gaining steam is outsourcing all transactional processes, with the advantage of allowing HR managers to focus on strategic issues. The outsourcing of commoditized tasks, with

managers ruthlessly seeking greater and greater efficiencies, will move to organizations of all sizes in a manner akin to payroll outsourcing. Smart managers will begin to focus almost completely on strategic issues.

2. Strategic Modeling of Human Capital

While strategic planning for business development has become quite sophisticated at most organizations, strategic modeling for human capital management remains rudimentary. Since human capital is deployed to meet strategic goals, an alignment between strategy and people is crucial.

Strategic modeling is a complex topic, but the portfolio modeling concept of financial capital management can be very useful for strategic human capital management. Under portfolio modeling, financial capital managers identify risk profiles of each strategic objective and create relative portfolios. Human capital managers can create risk and opportunity profiles along business lines (business unit with highest growth potential or with product development needs) and then deploy capital accordingly to get the best returns. Just like financial managers, HR managers cannot do this efficiently without understanding their capital profile and risks (e.g., employee competencies associated with business needs). This forms a significant part of building captive knowledge.

3. Scientific Thinking

Science and HR at the surface seem to have no natural relationship. The lack of scientific thinking in human capital management remains virtually universal. Paradoxically, science has the potential of transforming human capital management even though people are unpredictable. A common misconception is that science is about certainty, when in reality probabilistic scientific applications are far more pervasive than applications of certainty.

As an example, our competency-based 360 performance management system offers standard feedback and gap analysis reports. Based on mathematical models, which derive organizational competencies from the sum total of individual competencies, an organizational map is created highlighting strengths and development needs, identifying strategic gaps, defining desired recruitment competence profiles and much more. Using NASA's mature moon-surface profiling technology, it even creates a color-coded organizational map enabling managers to view variations over time. With the advances that have been made in Web technologies all of this can be done in real time. Another indicator of scientific thinking in this space, based on high quality research, is the correlation of employee engagement with business performance.

Unfortunately only a very few examples exist. Lack of scientific thinking creates waste and even harm. The concepts of reliability and validity, so vital in assessments, are often not fully understood or are misinterpreted. The confusion between causal effects

Weblink

Read about strategies in human capital in "The Who, What and How of Strategic Leadership" in this book and on the Web at www.people-project.com.

and correlation is widespread. Yet we remain optimistic that scientific thinking and modeling will one day become a pillar of human capital management.

Human capital metrics and benchmarking are two areas that need revamping through scientific thinking. Metrics are crucial to management of any type of capital, but poorly developed metrics can do more harm than good. The use of metrics in HR is slowly growing, but many of the typical metrics have no causal relationships to the desired outcomes. Input metrics, like training dollars per employee, may have little relationship to desired outcomes.



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Human capital managers need to carefully evaluate the reliability and validity of metrics before adopting them, and limit the number of metrics they implement.

Benchmarking can be useful, but in our experience, it is widely misapplied in HR. Many of the external benchmarks have little referential integrity in the sense of their relationship to desired outcomes, and most become quickly outdated. It is much better to develop internal benchmarks, both relative and absolute, and utilize these along with a very limited number of external benchmarks.

4. Predictive Intelligence

Knowing how capital markets will respond to external inputs with a level of certainty far exceeding the 50/50 chance of a coin toss is a measure of predictive intelligence, which has transformed financial and economic management. It would be hard to imagine managing the nation's economy without leading economic indicators, which are outcomes of predictive intelligence.

Imagine if HR managers could know, with good certainty, how employees will react to an unexpected merger announcement. Or whether the company is going to lose a large percent of their key talent pool within the next six months. These are percentage examples of predictive intelligence in the human capital space.

With the advent of Web and online assessment technologies, it is now possible to get such intelligence in virtually real-time and at very low cost. The best solutions go even further – converting the intelligence into insights by merging assessment with enterprise data and by analyzing data across multiple boundaries of demographics, location and business entities. Advanced solutions in this space embed scientific knowledge into software and other applications, avoiding the need for HR managers to have specialty skills.

While predictive intelligence has the potential of transforming human capital management, poorly generated data or improper

application of the data can hinder the process. While HR managers feel very comfortable about surveys and assessments, many of the applications that we have observed fail scientific measures of validity, reliability or anonymity. We cannot emphasize enough the need for HR managers to verify that the intelligence has been acquired under rigorous and scientifically valid methodologies.

5. Distributed Markets for Human Talent

The markets for human talent look very different today than those of 25 years ago, and are likely to look radically different again in

another 25 years. Many former employees now offer talent in an open market through consulting agreements and project-based contracts. This trend will accelerate as talent markets become global. The best talent for communications development may now reside in Bangalore, India, rather than in one's own communications department or in New York.

This distributed market for talent may not neatly fit the entrenched hiring processes of today, but it offers great opportunities for success for the adaptive manager. When faced with similar dilemmas, financial capital managers have adapted quickly and now have countless ways to minimize risk and increase returns. Adapting to these changed talent markets will require human capital managers to master a variety of new issues. The legal protection of intellectual property is but one example. The payoff is that managers will have a great deal more flexibility in matching talent to strategic needs – and at a much lower cost.

Summary

Human capital is typically the largest component by far of an organization's market value. Viewing this capital as a true capital asset can provide valuable insights, and managing it accordingly can yield valuable results. Human capital managers (HR professionals) carry a great burden for managing this critical asset, but they also have a great opportunity to be the business champions of the 21st century by adopting the road map proposed here to creatively and courageously utilize science and technology. The road map offers HR executives the opportunity to do what was previously either very difficult or impossible. Today we propose that HR executives have the opportunity to sit at the executive committee table as strategic partners by adopting new innovative solutions from the marriage of science, technology and intellectual resources. ■

Sky Financial Gains Employee Intelligence for Repositioning Efforts

(4/20/2005) People Performance Profit, Project Volume 1

By PeriscopeIQ Business Development, PeriscopeIQ

Background

Sky Financial Group is a \$12.7 billion diversified financial holding company and is among the 50 largest bank holding companies in the nation. With more than 250 financial centers and over 250 ATMs serving communities in five states, Sky Financial's goal is to transition itself from a top-level "banking" organization to a leading financial services provider.

Challenge

To make this transition, Sky must ensure its staff has proficient knowledge and competency in a wide range of areas.

With dispersed locations, it is sometimes difficult to assess the training needs for each employee and financial center. As a part of a financial services strategy, it was critical for Sky to identify its staff's competencies as well as areas that require development.

The company decided to conduct a gap analysis of the skills of its financial center and operational managers (team leaders) in

ensure its validity and the other two were for the financial center and operational managers. Because some employees did not have access to email, PeriscopeIQ used a medley of deployment techniques including authenticated invitational email, intranet links and a few paper assessments and then consolidated the results online from the various sources.

In addition to the in-depth analysis that PeriscopeIQ provided, Sky wanted a letterform report sent to each respondent thanking him or her for taking the survey and identifying his or her strengths and development needs. PeriscopeIQ developed algorithms to produce this custom report, and, with one click, the report was sent to the individual.

Transformative Intelligence

In today's competitive business environment, it is critical for organizations to act quickly to meet the demands of the marketplace. Sky needed to gain immediate intelligence on its employees'

"We had many customized requests for PeriscopeIQ due to our diverse technology landscape across financial centers," said Jeri Close, VP of Training for Sky. "PeriscopeIQ was able to meet all of our special requests for deployment, reporting and segmentation without slowing down the process. And, the ease of use of the solution enabled us to analyze the data using PeriscopeIQ's "wizard-like" reporting capabilities without technical assistance."

seven key areas, including: personal data (i.e. tenure, education, computer skills), understanding of organizational profitability, employee relations, deposits and loans, insurance, trust and investments and small business or operations, depending on the employee's role.

Solution

Sky turned to PeriscopeIQ to make certain that its assessment was aligned with its strategic goals.

PeriscopeIQ took Sky's paper-based survey, which could have taken months to create, distribute and analyze, and created a valid, online assessment and deployed it to the target audiences.

PeriscopeIQ consulted with Sky to ensure a robust survey by creating specific, strategic questions addressing each of the seven core areas, organizing the survey for easy analysis and segmenting the audience into proper groups to obtain effective results.

Three online surveys were deployed in just weeks to more than 400 employees. The first was distributed to a pilot group to

competencies in order to provide the necessary training and development programs to help transform the company into a leading financial services provider.

"PeriscopeIQ created a valid, robust online assessment and quickly deployed it to the target audience in order to identify their strengths and areas of development," explained Close. "Through the strategic analysis of the results, we are now able to design an effective, corporate-wide training and development plan."

"The entire process took about 1/5th of the time it would have taken with the traditional, paper-based method and we achieved a 96% response rate," added Close. "The time savings in creating and deploying the assessment and analyzing the results alone made the solution cost effective."

"Considering that we were able to capture this critical intelligence on individual employees was instrumental in assessing our overall corporate training and development needs," said Close.

The Solutions Network, Inc. Leverages Periscope360 to Coach Executives Climbing the Corporate Ladder

(4/20/2005) People Performance Profit, Project Volume 1

By PeriscopeIQ Business Development, PeriscopeIQ

Background

The Solutions Network, Inc. (TSN) provides human resource consulting through a core group of highly credentialed professionals specializing in virtually every aspect of human resources, performance management and organizational effectiveness.

Challenge

TSN was hired by a "spin-off" from a Fortune 25 company to coach certain executives that it identified for "fast tracking". In

were ensured confidentiality through Periscope360's built-in third-party anonymity (TPA) feature and its deployment over a secure network.

Most of the responses were received quickly and, following an automatic email reminder from Periscope360, 100% of the evaluators responded - a much higher response rate than the 50-60% that is typical for 360° evaluations. TSN was able to monitor the evaluation's progress and create final reports online just 10 days after the assessment was developed and deployed.

"PIQ's online solutions offer scientific rigor, strong analytical capabilities, intellectual depth, industry experience and an easy-to-use interface. All of these characteristics enable them to deliver strategic insights and intelligence in real time," said Richard J. Anthony, Sr., founder and president of TSN.

order to properly coach these executives, TSN needed a clear understanding of the executives' individual strengths and development needs.

Solution

TSN partnered with PeriscopeIQ (PIQ) to gather and analyze data and determine the executives' strengths and weaknesses.

PIQ used Periscope360, its highly flexible competence-based performance management system. Periscope360 is designed to improve organizational strategic mapping, produce sizeable performance gains and role clarity, and ultimately enhance profitability.

Starting from a library of validated competencies, PIQ worked with TSN to build a targeted assessment that matched the strategic goals of their client. PIQ identified target groups of evaluators from which TSN needed to gain anonymous feedback. The groups included the executives themselves, their supervisors, subordinates, peers and external services providers, such as customers and partners. The assessment was pre-validated through an internal verification process before being sent to the evaluators.

The assessment was deployed through the evaluators through Periscope360's group management system which automatically personalizes each deployment message with the executive's name and the evaluator's name and group relationship. The evaluators

Periscope360 allowed TSN to analyze responses by evaluator type, by gaps between respondent groups, and by using statistical factors like average and standard deviations and the statistical significance analysis of such gaps.

TSN easily customizes the reports simply by choosing options using the Periscope360 point-and-click interface. Reports were emailed within hours after the assessment was completed. The results enabled TSN to provide individualized coaching for each of the executives based on their identified evaluation needs.

Transformative Intelligence

Periscope360 offers the unique capability of automatically transforming individual feedback performance data into an organizational strategic performance map when a large percentage of the organization's staff goes through the evaluation process. Using advanced algorithms and statistical analysis tools, individual strengths and needs are amalgamated into strategic organizational strengths and weaknesses.

This mapping process can be drilled down from the corporate level to the business unit and even down to the department level providing a powerful managerial tool to leverage valuable assets and address gaps.

TSN plans to continue using Periscope360 for their other clients.



PeriscopeIQ: Human Capital Intelligence Solutions and Expertise

About PeriscopeIQ

PeriscopeIQ delivers enterprise-wide solutions to improve productivity and performance through its leading-edge Web technology platform and rigorous methodologies.

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Per-i-scope (noun): an instrument which allows a viewer to see things that are not in a direct line of sight

Attracting and retaining the best people is the key to a company's success. Organizations are increasingly considering their human resources as one of their most critical assets. As a result the bar for HR professionals is being raised significantly.

For HR managers to contribute to their organizations' bottom line requires sound management decisions. For most organizations the task of gathering the data vital to making these decisions with confidence can be overwhelming. PeriscopeIQ provides comprehensive, Web-based intelligence-gathering and assessment solutions that provide otherwise unobtainable views of employee performance, attitudes and engagement – faster and more cost-effectively than ever thought possible.

PeriscopeIQ's solutions do much more than simply collect data. The combination of their strategy-driven frameworks and "best-of-breed" analytics (META Group, 2003) provide the robust and valid intelligence needed for decision making, enhancing a company's bottom line and turning potential into positive performance.

PeriscopeIQ Solutions

PeriscopeIQ offers four key differentiators:

- Strategic solutions focused on business value, not simply data;
- Methodologies based on innovative thinking, advanced statistical theory and practical business considerations;
- Advanced analytical capabilities that instantly transform data into predictive and actionable intelligence; and
- A highly experienced staff with extensive knowledge of business and industry.

Human Capital Management Solutions
PeriscopeIQ offers a range of world-class

human capital tools for HR professionals who are ready to take their organization to the next level.

Whether your organization needs to manage the performance of a group or an individual to enhance overall organizational success or groom the next generation of leaders, we have the solution for you. Our solutions enable you to assess talent within your company, assess your organizational culture, manage diversity and identify what your employees really need regarding benefits.

PeriscopeIQ's HR-related solutions include:

PeriscopeSMS – The best compensation management system on the market, PeriscopeSMS (Salary Management System) integrates all the compensation information you need into one system. Its extensive suite of tools seamlessly combines employee records, job data and documentation, job valuation, internal job measurement, market pricing and salary planning, empowering you to make the right salary management decisions – quickly and reliably.

PeriscopeCOMP – A novel tool for designing and deploying a wide variety of compensation surveys.

PeriscopeBENE – A value-modeling and optimization tool to help your company get maximum value from its benefits program.

Periscope360 – A powerful 360-degree assessment system with unique organizational mapping capabilities.

PeriscopeCULTURE – Organizational assessments, providing extensive segmentation, benchmarking and employee engagement metrics.

PeriscopeEXIT – Intelligence gathered from departing employees is a vital tool for reducing employee turnover and its cost.

PeriscopeTALENT – A solution for tracking and benchmarking organizational and employee development. ■