



**Kevin Hadlock**  
*Senior Director*

Kevin is a Global eLearning Solution Specialist. He has designed numerous distance-learning and web-based training programs, developed and taught many seminars, webinars, and full, blended training programs, and has authored content used globally by thousands of credit trainees.

View all articles of this edition at  
[MoodyAnalytics.com/RiskPerspectives](http://MoodyAnalytics.com/RiskPerspectives)

## Getting Human Data Right: The Hidden Advantage

KEVIN HADLOCK

With their focus on profit margins, data and risk management, and compliance with an increasing number of regulations, financial institutions often pay insufficient attention to the human side of their operations. This article addresses that deficiency and explains the sea change taking place in how risk professionals acquire “human data” – the quantifiable ability of employees to do their jobs well.

Risk professionals are prone to mismanaging the risks and rewards associated with employee knowledge and skill levels. Improving, capturing, and driving this critical – but frequently forgotten – data can help institutions gain a competitive advantage.

### **Knowledge and skill: The data risk professionals forget**

After years spent working with many banks around the world in the credit and financial sector, I have observed that few institutions engage in persistent human data quantification and management. They may conduct the occasional gap analysis, sometimes followed by a burst of training activity, but the discipline of continuously gauging employee knowledge and skills and then optimally providing training and access to self-directed and socially-driven learning is almost nonexistent.

This lack of an effective ongoing process leads inevitably to negative outcomes, such as costly one-time training ventures (where the training ages quickly and is too expensive to refresh on the fly), employees left to grasp at every informal learning source they can find (frequently Wikipedia or Google), and C-level executives who cannot see the value in spending on training because they do not believe investing in their employees will reap rewards in kind.

So when profits decline and budgets tighten, training gets whacked – and human data suffers. As a result, performance deteriorates and risk increases. Right when the need is greatest to minimize risk and maximize reward, the needle usually gets pushed in precisely the wrong direction!

### **Human beings: Great risk, great reward**

Employees are a financial institution's double-edged sword: They represent its single greatest source of risk and its most profound opportunity for reward. In spite of all an organization may do

to comply with regulations, establish and monitor sound policies and procedures, and enhance its image in the marketplace, a wrong or fraudulent decision by just one employee can “undo” the millions of dollars and countless hours invested in optimizing business prospects.

knowledge and skill that are core to what I call “human data.”

**Organizations tend to focus on performance, which is obviously appropriate. But it is the rare institution that appreciates the speed of change taking place in its employees' areas of expertise.**

---

The probability of errors creeping into an employee’s work output rises at an increasing rate the farther he or she gets from fresh, relevant human data. Knowledge and skills age so rapidly that the likelihood of employee error approaches 100% by the end of the five-year period.

---

For example, a loan officer who fails to notice key credit risks may grant a loan that quickly goes into default, costing the bank several million dollars in lost principal and interest and causing serious reputational damage. The profitability of dozens or even hundreds of performing loans can essentially be nullified in the process.

Conversely, an astute credit analyst may determine that a borrower has upside that isn't readily apparent and so advises decision-makers. The result could be the granting of a loan that leads to a highly profitable and expanding long-term relationship that touches many areas of the bank in a positive way.

I have experienced both situations and have seen the positive and negative effects on whole communities. Credit professionals in each instance had vast amounts of data and transparency at their fingertips. Knowing and applying sound credit and risk principles, or failing to do so, were the deciding factors.

#### **Knowledge and skill: Human data that matters**

So, how do credit-granting organizations minimize the downside of employee risk, while maximizing the upside? Is it enough to focus solely on optimizing systems or fine-tuning policies? Does compliance with all the regulations and risk management regimes put forth by all the governments and supremely qualified boards in the world eliminate risk once and for all? Does best practice data management solve all ills? As much as these practices might help, the answer to each of these questions, is “no” – as long as people are involved.

All banks train their employees to one degree or another. What too often gets left out, however, is a refined, dynamic focus on

Performance consultant and learning expert Jane Hart notes that, “the half-life of a given stock or skill is constantly shrinking – and is now around five years.”<sup>1</sup> In practical terms, this means that by the time an employee is seasoned and comfortable, the definitions of seasoning and comfort have changed, often dramatically.

#### **An example of outdated human data**

So how could this scenario play out? The poor loan officer from my earlier example has an accounting degree and, upon joining the bank, is trained in the classic way: months of classroom and workbook training, followed by placement in a division loan center under a manager who is a 25-year veteran. The training focuses largely on EBITDA as a primary determinant of borrower creditworthiness, a view reinforced by the employee's manager. On the job, the new officer is required to use a recently licensed spreadsheet application to capture borrower financial information and generate analysis-enabling reports. He notices that one such piece of output is a Uniform Credit Analysis (UCA) cash flow report and asks his manager if it has merit. The manager responds that she is not familiar with the report and that it appears to have little value in any case, so he disregards it.

Shortly thereafter, a large existing borrower requests a renewal on a long-term line of credit, and the new officer is tasked with conducting a credit analysis and making a recommendation.

Using all his training and his manager's guidance, he focuses squarely on EBITDA, failing to notice that the company's performance varies significantly from year to year. He doesn't realize that, while useful in assessing risk for generally stable companies, EBITDA often fails to capture the critical nuances of enterprises in flux. So, seeing profits still in the black, he grants the

large renewal request (with his manager's approval), not noticing that true cash flow has become increasingly negative for the past three years, although he has projected it to remain positive for the foreseeable future. Within a year, the loan goes bad. The loan officer is now at a loss, wondering why it happened and how he might have predicted the failure.

The problem in this example is not that the bank didn't invest in the new loan officer's human data, but that there was no means in place to keep that data fresh and up to date. Both his formal training and his manager's guidance were grounded in established analytical principals, but failed to take into account what for them was an emerging analytical technique – cash flow analysis – that would have been greatly facilitated by the introduction of the automated spreadsheet tool. Upon an exhaustive debrief, key decision makers realized that staff had bypassed information that had been at their fingertips. They modified the policy to require an analysis of cash flow for all commercial loans in the future.

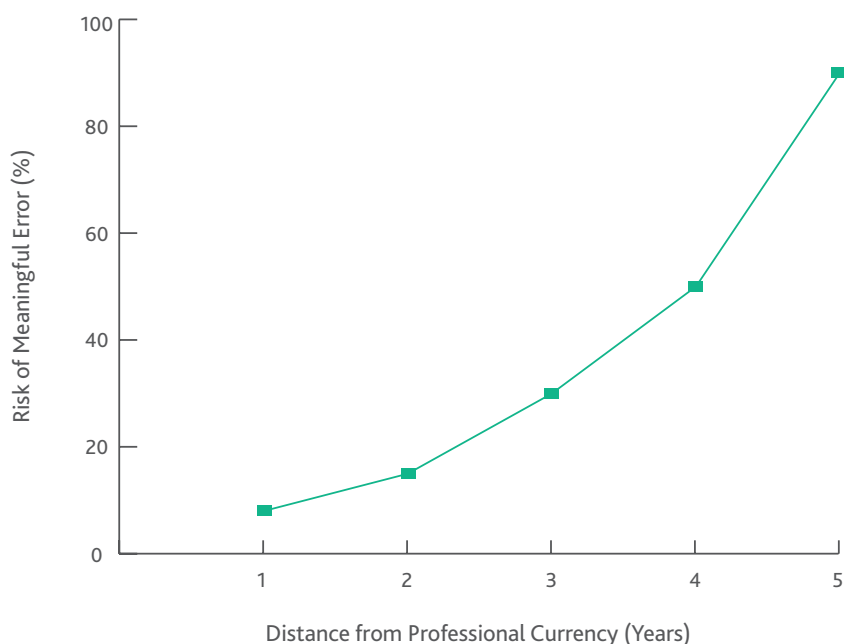
This is a true story that illustrates that human data must be updated constantly. Furthermore, systems or processes must be put in place to ensure that knowledge and skills are readily

updateable. In other words, professional currency cannot be an accident. **If the elevation or adjustment of human data is left to chance, risk will outweigh reward and the likelihood of costly mistakes will increase.**

Figure 1 illustrates that the farther away an employee is from having current human data, the higher the likelihood he or she will make meaningful errors.

Figure 1 isn't defensible on a purely empirical basis, but rather is meant to be illustrative. I could have used any time frame for the "Distance from Professional Currency" axis; I chose to use Hart's five-year skills half-life figure, as it has researched relevance. Using a straight percent scale for the "Risk of Meaningful Error" axis and then assigning specific percentages at one-year intervals is likewise unscientific. I have drawn the progression simply to emphasize that the probability of errors creeping into an employee's work output rises at an increasing rate the farther he or she gets from fresh, relevant human data. Knowledge and skills age so rapidly that the likelihood of employee error approaches 100% by the end of the five-year period.

**Figure 1** The relationship of "professional currency" to risk



Source: Moody's Analytics

### How today's risk professionals can elevate their own human data

Interestingly, employees themselves often best recognize both the need for professional currency and the implications of not having it. They sense the urgency of having up-to-date knowledge and skill more than their organizations do because they are the ones who have to keep their jobs and advance their careers. For them, the stakes are both high and personal.

On a related note, recent surveys and workplace studies show that, although formal training provided by the institution is useful, it provides only a fraction of the ongoing learning that employees need and is thus at the low end of the scale in terms of human data value-added.<sup>2</sup> Additional insight provided by Hart is again useful.<sup>3</sup> Her research into how employees learn what they need to do their jobs – in other words, to maintain their professional currency – is summarized in Table 1. The findings are listed in order of descending usefulness.

Although still important, formal training is at the bottom of the list for the approximately 700 survey respondents. **Other means of acquiring current human data score higher, and most of them are either employee-directed or socially sourced.** This is a multi-year trend that reflects the current and ongoing reality of business. The advent of technology-enabled access to knowledge on virtually every topic, as well as to other people via social networks and forums, has put the means of human data enhancement squarely in the hands of the employees themselves.

### Learning and performance ecosystems enhance performance

This article is not arguing against formal training provided by the institution. Quite the contrary, it remains a primary and foundational way for an organization to communicate its way of doing business to its staff and will always have a role in workplace learning and performance. But the trends and facts identified in Table 1 actually make a great deal of sense from the business side. Organizations simply do not have the budgets or dexterity to keep pace with every change and nuance in an increasingly dynamic business world – and then to nimbly and fully communicate them to every staff member. This would require expense and administrative overhead that virtually no company could efficiently take on.

What financial institutions can do, however, is a much better job of creating structured but open environments that combine formal training with self-guided and social learning, so that professional currency is optimized rather than achieved coincidentally or, worse, accidentally.

Perhaps the most promising approach to installing such environments is a construct known as a "learning and performance ecosystem." In their white paper on this subject, Marc J. Rosenberg and Steve Foreman make the case that "we must move away from individual, siloed, 'one-off' [learning] solutions to an ecosystem comprised of multi-faceted learning and performance options that enhance the environments in which we work and learn."<sup>4</sup>

**Table 1** 2013 "Learning in the Workplace" survey results

	Not Important	Quite Important	Very Important	Essential	V. Imp. & Essential
Knowledge sharing within your team	3%	12%	30%	55%	85%
Web search for resources (e.g., Google)	2%	17%	32%	49%	81%
Conversations and meetings with people	2%	19%	40%	39%	79%
Personal and professional networks and communities	3%	22%	35%	40%	75%
External blog and news feeds	8%	22%	40%	30%	70%
Content curated from external sources	9%	29%	39%	23%	62%
Self-directed study of external courses	14%	33%	35%	18%	53%
Internal job aids	20%	37%	26%	17%	43%
Internal company documents	13%	44%	29%	14%	43%
Company training/e-learning	25%	42%	20%	13%	33%

Source: Jane Hart Blog

They define learning and performance ecosystems as structures that strengthen “individual and organizational effectiveness by connecting people, and supporting them with a broad range of content, processes, and technologies to drive performance.” They address six primary components of these ecosystems and depict them in an interrelated way:

1. Talent management
2. Performance support
3. Knowledge management
4. Access to experts
5. Social networking and collaboration
6. Structured learning

There is more to a learning and performance ecosystem than training. At the heart of it all is human data – the knowledge and skills employees need to do their jobs effectively. That data comes from structured learning, social networking and collaboration, access to experts, and effective performance support systems. It is managed, optimized, and applied most effectively and broadly over time through sound talent and knowledge management schemes.

Although they don't say it in as many words, what Rosenberg and Foreman suggest is that optimized human data is so critical, and its insufficiency so pervasive, that a new, more integrated and all-encompassing approach to employee training is paramount if business enterprises are to compete well and survive. In other words, six weeks, or even six months, of new hire training alone doesn't cut it anymore – if it ever did.

**Once employees are turned loose in the workplace, having a more thoughtful, dynamic approach in place will be critical to maintaining their knowledge and skills.** Organizations that fail to do so fall behind, sometimes quickly. The results then show up in falling bottom lines – and, in the case of credit-granting organizations, in decreasing credit quality and loan losses.

#### Quantifying human data as a step in managing risk

If you work in credit and risk long enough, you begin to see everything in numbers. You start to believe that life must be quantified to be understood. Thankfully, there are ways to quantify, if imperfectly, human data.

In his report on tracking the knowledge and skills of credit professionals, “People Risk: Improving Decision Making in Commercial Lending,”<sup>5</sup> Ari Lehavi of Moody's Analytics explains an exam-based methodology for collecting metrics on human data in the area of fundamental credit risk assessment. He shares critical empirical details and broad results, all of which shed light on the strengths and weaknesses exhibited by lenders, analysts and relationship managers at banks around the globe. He further breaks this information down geographically and by subject matter (i.e., financial risk, marketplace/industry risk, management risk, and risk mitigation).

The most salient feature of all of these details about human data is that it is clearly actionable. In other words, evaluating it accurately can lead to direct remediation that shores up weak areas and demonstrably elevates the quality of that human data. Among the report's key findings are the following:

- » The average test score across subjects included in the assessment exceeded the minimum subjective pass threshold by a mere 2%.
- » Financial risk had the weakest relative score. Approximately 42% of people answered fewer than 70% of the questions correctly in this critical subject area.
- » Major banks around the world showed a wide disparity in test performance across all areas of risk.
- » An institution's aggregate skill and knowledge test performance correlated highly with its relative default risk. Although there may be other contributing factors, the lower the bank's average score, the higher its relative default risk, as measured by Moody's Baseline Credit Assessment rating.

This last finding is particularly enlightening and reinforces the first proposition in this article – that subpar human data contributes to higher risk in a credit-granting organization. However, perhaps our key takeaway from Lehavi's report is that human data can be quantified and improved. And institutions that engage in this type of process, effectively and consistently, gain a current and highly useful sense of the level of human data in the organization, both individually and collectively.

#### Investing in individuals rewards the organization

Institutions that have the foresight and will to implement integrated learning and performance ecosystems – or critical

components thereof – in the near term will have the advantage over both the medium and long terms. **There is no "one size fits all" answer to this, but an abiding appreciation for the essential nature and inherent worth of human data, and the criticality of continuously optimizing it, is the foundation on which to build.**

Organizations that grasp this, and then make well-considered efforts to go beyond providing formal training to creating a

permanent learning-is-performing environment – subscribed to and supported by all levels of the organization – will swing the risk/reward pendulum inexorably toward the reward side. This, in turn, will unlock human potential and corporate profits at an increasing rate. Thus is the power of human data and the reason for giving it its due.

---

1 Jane Hart, *Social Learning Handbook 2014*, page 20, 2014.

2 Don Taylor, *What will be big in workplace learning in 2015?*, January 7, 2015.

Allison Rosset, *Trending in Workplace Learning 2015*, January 13, 2015.

3 Jane Hart Blog, April 22, 2013, <http://www.c4lpt.co.uk/blog/2013/04/22/company-training-of-little-value>.

4 Marc J. Rosenberg and Steve Foreman, The eLearning Guild, *Learning and Performance Ecosystems*, December 2014.

5 Ari Lehavi, Moody's Analytics, *People Risk: Improving Decision Making in Commercial Lending*, November 18, 2014.



# RISK PERSPECTIVES ONLINE

Find additional integrated risk management articles, interviews, and multimedia content at [MoodyAnalytics.com/RiskPerspectives](http://MoodyAnalytics.com/RiskPerspectives)

## CONTACT US

Visit us at [moodyanalytics.com](http://moodyanalytics.com) or contact us at a location below:

### AMERICAS

+1.212.553.1653  
[clientservices@moody.com](mailto:clientservices@moody.com)

### EMEA

+44.20.7772.5454  
[clientservices.emea@moody.com](mailto:clientservices.emea@moody.com)

### ASIA (EXCLUDING JAPAN)

+85.2.3551.3077  
[clientservices.asia@moody.com](mailto:clientservices.asia@moody.com)

### JAPAN

+81.3.5408.4100  
[clientservices.japan@moody.com](mailto:clientservices.japan@moody.com)

© 2015 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

**Moody's**  
ANALYTICS