An Essay

On

Knowledge

As A Corporate Asset

Building the case for Human Capital

Thought Leadership from The Performance Paradigm

Jerome J. Peloquin
Co-Principal Consultant
The Knowledge Asset: The Coin of Human Capital

An essay on the value and worth of knowledge in the corporation.

By

Jerome J. Peloquin

Virtually every business in the world faces the same fundamental problem: Maintenance of their competitive edge through the application and formation of knowledge. The plain unvarnished truth is that, in many companies, much of the operating knowledge is undocumented; this tacit (undocumented) Knowledge can easily be lost through retirement or attrition. In the technology field, it's much worse. Knowledge workers with key competitive and often proprietary knowledge are literally stolen away by competitors. And, without the ability to organize, store, retrieve and manage it, much hard-won knowledge leaves with them. Some companies are using stock options to hold key employees. That's a good idea, but what about those who hold tacit knowledge but are essentially invisible to the system? In many companies, much of the organizational "know-how" exists in the minds and private notebooks of workers, programmers and managers. Management of corporate knowledge assets should be as common place as the management of information is today. Meanwhile, valuable knowledge assets are irretrievably lost, running like quicksilver through the personnel office.

An example of this hidden, or tacit knowledge may prove instructive. While working at a large expatriate automotive company recently, I was assigned a project in the production department of their motorcycle plant. Management was preparing to fire a fifty-something female production control supervisor named Carrie because of constant tardiness. She was an unattractive, poorly educated, high-school drop out with bad grammar and a strong Ohio twang – no stock options for Carrie.

Although my discussions had nothing to do with her problem, I determined, after several interviews, that she was the only one in the facility who really understood the plant's
computerized production control system. The production control system was a rather complex and idiosyncratic program which had originated in Japan, and had few knowledgeable advocates in this plant. It ran well and did the job only because Carrie knew it backwards and forwards. In fact, she taught the program’s functions to new production managers. Firing her would have created a manufacturing nightmare, with bottlenecks, lost orders, and an emergency call to Japan for several engineers. No one knew Carrie was the only repository of this knowledge. Plant production managers assumed that she was only one of many production control people who had this knowledge. They were wrong.

"Knowledge is the coin of Human Capital"

This paper has two goals. They are: (1) To postulate that the value of knowledge as a component of human performance is, in fact, a tangible corporate asset; and (2) To begin a dialog with the both the financial and business communities regarding the inclusion of the "knowledge asset" as the value-bearing part of Human Capital. Today, knowledge is considered a key strategic asset for many corporations. It is our competitive edge and gives us the advantage in almost any business situation. Yet, it is one of the least understood of all corporate attributes. Knowledge, its representation within the corporation, its value and management, is the focus of this paper.

As we all know, human capital still has no formal place on the balance sheet. Consequently, Knowledge, lacking formal recognition by the accounting system, often receives less attention than it deserves. I fully realize that the path to establishing the institutional value of knowledge and its corollary, human capital, is well worn. And, as the economist Robert Reich said in a recent e-mail, "The burden of proof is on you." It is my belief, Dr. Reich, that the time is ripe for a new sojourn into this dismal realm, in part because of this time of unprecedented intellectual expansion when ideas, like new application software, create capital from the mind rather than from the mine. Perhaps it is time to re-asses the rules of the game. Unlike capital formation, knowledge formation is totally egalitarian and springs from all sectors of our commercial society.
What is corporate knowledge? How is it applied and how is it valued? For years managers have said “if you can't measure it, you can't manage it.” Can we, then, measure knowledge? And, if not, how can we possibly manage it? Some people are said to be "knowledgeable,” and others are not. Who knows? And, how do we decide? In fact, in industry, we have no objective means to measure knowledge. We do not identify knowledge except in highly subjective terms. Much of what we call knowledge is really information.

Usually we treat knowledge as if it were some benevolent genie whom, if we cajole, feed, and sometimes bribe, will make us the beneficiary of its largess. The simple fact is that the qualitative and quantitative management of knowledge is essential if we are to survive in the global marketplace. Knowledge is our competitive edge. Knowledge is the one factor which delivers value to the corporation, but is not officially recognized on the balance sheet. Currently, one cannot formally impute worth to knowledge in financial terms, other than as some vague and unspecified contribution to profit. However, since Knowledge is truly the coin of Human and Intellectual Capital, it is fundamental that we are able to both identify and quantify it.

The much referenced, ill-defined Knowledge Asset has no clear objective definition, except to imply that it contributes in some way to the value of the company. In truth, knowledge is the asset bearing component of Human Capital. Knowledge and the “Knowledge Asset” are essential to the demonstration of the value of people in our business model. Our inability to value people is one reason for the almost universal undervaluing of Human Resources, demonstrated, for example, by the consistent under funding of corporate training.

Any discussion of knowledge in business should first differentiate between information and knowledge. Although the dictionary would have us believe otherwise, knowledge and information are not synonymous. Dr. W. Edwards Demming said knowledge is information in action. It is our belief that Knowledge is a distinctly human attribute. The following is an operational definition used for the special purposes of this essay (see attachment # 1). First, information. Information exists external to the human mind. Information does not become knowledge until intelligence, integration, judgement, synthesis and a host of other human attributes are applied to it. Information is then transformed into knowledge by the human mind.
Information is useless unless we can act upon it, and that implies that it must first be transformed into knowledge. Once integrated into the existing knowledge framework of the individual, information becomes actionable knowledge.

In most cases, information cannot readily be transformed on-the-fly. It cannot simply be passed like a spreadsheet, from one person to another. An example here may prove illustrative. If the spreadsheet is merely next months operating budget, then a few simple questions should permit me to derive knowledge from it. However, if we have a complex product forecast employing regression analysis and pivot tables, a bit more explanation and indeed some training may be required before I can transform the information in this spreadsheet into knowledge. The individual, especially when dealing with complex processes, must transform information by integrating it into their existing knowledge base. This transformation process, then, is the called education and/or training.

The knowledge asset combines a number of factors which can be objectively proven by the observation and accomplishment of a specific set of criteria. Accomplishment is represented by the realization of a discrete set of behaviors, called tasks, which, when employed by an individual, or group, results in a measurable outcome that adds value to the corporation.
The Criteria for Proof of a Knowledge Asset

There are four conditions that I believe are required to verify the existence of a knowledge asset. These conditions, or criteria, are:

- Creation of a set of graphical procedure guides which will permit a nominally trained worker to perform the task, or tasks, independently and without further assistance.
- Observation of correct job performance, which is proof of accomplishment.
- Quantification of the value of the accomplishment, as represented by an economic measure.
- Verification by an independent, certified assessor.

Note: This differs from ISO-9000 in that our written procedures must be employed and observed to be valid, not just documented. Secondly, the accomplishment of the tasks must have measurable, documented economic value. These conditions must be achieved and objectively monitored by an trained, independent auditor before a knowledge asset can be declared. And, to clarify the status of the auditor, that individual must be independent of the group performing the activities to be assessed, not necessarily independent of the company in which the activities occur.

In our current financial measurement and valuation model, an asset is typically a tangible object which, through appreciation or depreciation, accrues value to the corporation. A Patent, or Copyright, is an example of an intangible asset that is considered intellectual capital. We believe that this does not go far enough in documenting the knowledge assets of the corporation. The Patent also provides us with an objective precedent for the use of knowledge as a tangible asset. We propose to add the “Knowledge Asset” as another representation of value and objective proof of Human Capital. We intend to make this argument (here and in other venues) to Government and Business institutions that are tasked with such assessments. The Knowledge Asset is the tangible representation of the corporations "know-how," and is \textit{prima facie} proof of corporate competence. It represents the competence of the corporation. The sum total of these knowledge assets are the Human and Intellectual Capital of the company. One of the major
reasons for the failure of newly acquired businesses is that the purchaser does not recognize that its intellectual capital is at risk, since it resides in a limited number of employees. Whether disaffected as a result of the buy-out, new management, a move, or some other reason, the loss of these key knowledge assets (both the individuals and the knowledge they represent) could render the corporation incapable of performing.

It is fundamentally true that the ability to operate effectively is not sufficiently demonstrated by Patents or Copyrights. Ownership of a patent is not objective proof that the company can effectively, or efficiently, produce the product, just as owning the copyright to a symphony does not assure that musicians can play it. In part, the knowledge asset is to the patent what the musical score is when translated into specific music by the musicians. To extend the metaphor, it is a combination of the score and the competent performance of the music.

Finally, there must be economic value. It is fundamental that the proof of the knowledge asset lies neither in the ownership of the patent or the value of the accomplishment of production. The proof is not merely in the pudding, but in the combined elements of human knowledge assets, and their contribution to the value of the product, or service, delivered to the customer. This is a knowledge asset; this is the value of Human Capital.

Unless we can include the knowledge asset and human capital on the balance sheet to offset investment (as we do with other corporate assets), our ability to justify investment in building or retooling our knowledge infrastructure and Human Capital will always be problematic. Unless formally recognized by the Financial Accounting Standards Board (FASB), and reflected in the Generally Accepted Accounting Principles (GAAP), the financial and accounting systems will continue to work against such mission critical investments.

I submit the situation, as described in this essay, is both intolerable and incorrect, and must be rectified. It is a deficiency in how we report on, manage, and value businesses under our form of capitalism. One is hopeful, however, that the opinions expressed in this paper may provide the basis for a new dialog on the matter.
I would entertain participating in a "call for papers" issued by one or more parties with legitimate interest in the area. I would consider a symposium to be held next year, at a time and place convenient to all, as a successful outcome of this essay. If you have found interest here, and would like more information regarding the organization and management of Knowledge and Knowledge Assets, a White Paper, titled: “Knowledge Management: The structure and application of Knowledge as a strategic corporate asset,” authored by Mr. Peloquin and Mr. Meraviglia, will soon be available on the following websites: www.performanceparadigm.com and www.bwise.org.
NOTE: This model shows the logical progression of content types and their relationship to improved organisational performance. Data, Information, and Knowledge all have value in that they contribute to improved Performance and corporate PROFIT! As context is added, data becomes Information. As intelligence, integration and synthesis occur, Information is transformed into Knowledge. When applied by a motivated worker, performance and improved productivity result.

**Operational Definitions**

**Data**: Unrelated bits of corporate business content

**Information**: Data to which context has been added.

**Knowledge**: Information is *transformed* into knowledge through the application of intelligence, integration, and synthesis.

**Performance**: Knowledge applied to a measurable accomplishment that adds value to the corporation.

*Knowledge is a uniquely human attribute. It exists only in one's mind. Everything external to the mind is Information.*