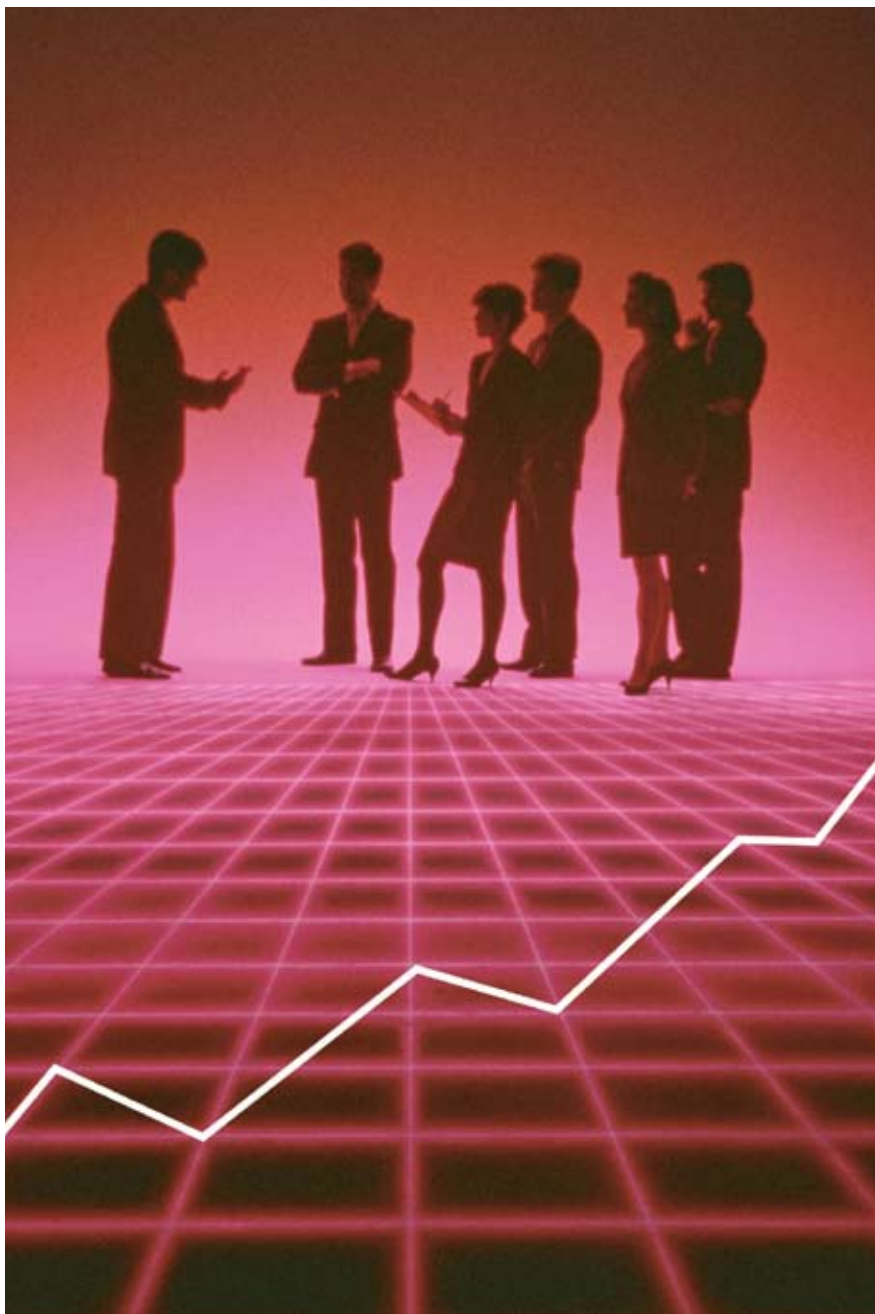


Linking Human Capital Investment *with* Organizational Performance



The Institute for Intellectual Capital Research (IICR) found that investment in employee training and development was associated with higher revenue. Firms that thrive in today's environment see themselves as learning organizations, and they pursue the continuous improvement of their intellectual capital.

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The intangible value embedded in insurance companies has been considered by many, defined by some, understood by few, and formally valued by practically no one.

That's why knowledge management is one of the greatest challenges facing business leaders today and tomorrow. Job titles such as Chief Knowledge Officer (CKO) and Chief Learning Officer (CLO) have been creeping into annual reports and job postings with increasing frequency. In fact, 25 percent of the Fortune 500 have them in their boardrooms already. These trail-blazing individuals have been given the unenviable task of channelling their

organization's knowledge into corporate initiatives that become an essential source of sustainable competitive advantage.

The first ever C-level executive to be appointed at an insurance company with the responsibility of harvesting the intellectual capital potential of the organization was Leif Edvinsson of Skandia back in 1991. By 1995, Leif and his colleagues in Sweden had published the world's first intellectual capital report. This intellectual capital statement was initially targeted to external stakeholders such as investment analysts and was quickly identified as a novel and innovative measurement report. It contained a variety of measures that endeavoured to provide insight into the intellectual performance of the company. Some of the primary measures included proxies for the training investment of employees, the adoption of new technology, turnover rates, computer literacy, and the number of new business ideas implemented just to name a few.

Although the first iteration of the report in 1995 was positioned as an addendum to the official financial statements of the corporation, it soon grew in popularity and demand. It was subsequently updated and published every six months and soon became more popular than the actual income statement and balance sheet. It turns out that the investment community realized early on that Skandia's intellectual capital statement was a leading indicator of future success.

Fast Forward

More than a decade later, insurance companies in America are still only at the embryonic stages of this new intellectual capital revolution. Much of what has been written about intellectual capital approaches the subject from an accounting and financial perspective. Many researchers are interested in answering the following questions: Why are some firms worth so much more than their book value? What specifically comprises this intangible asset of intellectual capital?

In 1962, economist Fritz Machlup concluded that 35 percent of the gross national product in the United States could be allocated to the information sector. Today, many of the world's largest knowledge-based organizations are valued at billions of dollars—in some cases, prior to selling even one dollar's worth of product or service. Insurance companies contain large and complex webs of human capital in the form of talent, experience and innovative capabilities. The concept of Tobin's q illustrates this significance for the insurance sector. Developed by Nobel

Prize-winning economist James Tobin, this ratio measures the relationship between a company's market value and its replacement value—that is, the cost of replacing its assets.

Let's take Hartford Group, which is trading at about \$85 per share, as an example. With 300 million shares outstanding, the market value of this company is about \$25 billion. The book value, however, as detailed in the shareholder's equity section of the balance sheet values the company at \$15 billion. This means that Hartford has a Tobin's q ratio of 1.67 (25 / 15). In other words, the market is providing a \$10 billion premium above and beyond what generally accepted accounting principles (GAAP) is assigning. Intellectual capital theory argues that a significant portion of that \$10 billion is a proxy for the intangible value that employee expertise brings to bear. Of course, in some other high knowledge-intensity sectors like software development, this Tobin's q ratio can rise significantly.

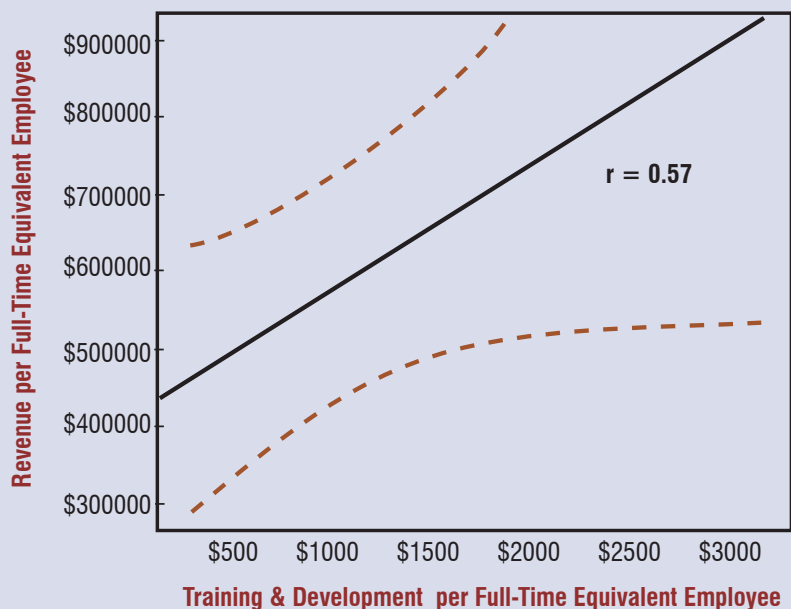
A relatively high investment in employee training and development was associated with higher revenue.

Microsoft's Tobin's q, for instance, is 6.0.

In 1989, the influential management writer Charles Handy suggested that the intellectual assets of a corporation were usually three or four times its tangible book value. He warned that no executive would leave his cash or factory space idle, yet when CEOs were asked how much of the knowledge in their companies was actually used, they typically said only about 20 percent. Knowledge managers are responsible for

justifying the value of intellectual capital constantly being developed in their organizations. While this elusive intangible may never be evaluated in the financial terms that accountants and financial analysts are accustomed to, its strategic impact is never in question. From the capture, codification, and dissemination of information, to the acquisition of new competencies through training and development, to the re-engineering of business processes, present and future business success will

CHART 1



TRAINING EQUALS REVENUE INCREASE:
Every \$1 increase in T&D was equal to an increase of \$168 in revenue per employee, according to IICR research.

be based less on the strategic allocation of physical and financial resources and more on the strategic management of knowledge assets.

What does this mean for senior managers at insurance companies? It means that the capacity to manage knowledge is a critical skill—perhaps the critical skill of this era. The capacity of an enterprise to create wealth will be based primarily on the capabilities of its people. If there is one distinguishing feature of the new economy, it is the ascendancy of intellectual capital. In developed countries especially there has been a shift from a manufacturing to a service economy. Firms that thrive in this new environment see themselves as learning organizations, and they pursue the continuous improvement of their intellectual capital.

The field of intellectual capital has come a long way since the early days of Skandia's reports. It is now a burgeoning academic discipline with several peer-reviewed journals, dozens of global research institutes, and the subject of hundreds of doctoral dissertations. Intellectual capital is defined as encompassing three sub-components: human capital, structural capital, and relational capital.

Human capital is the stock of knowledge that exists at the individual level in an organization. Since this knowledge resides primarily in the minds of employees, it is often thought of as tacit and thus difficult to codify and transfer. Some would argue that all of an organization's knowledge exists only in the minds of its employees. However, it is not that simple, since organizational knowledge also exists in other forms—in structural capital, for example.

Structural capital is the knowledge left behind when employees go home for the evening. It consists of all the non-human storehouses of knowledge embedded in things like databases, procedures, filing cabinets, and routines. It is external to the employee but internal to the firm. Structural capital deals with the mechanisms and structures of the organization that can help

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support employees in their quest for optimum performance. An employee can have a high level of intellect, but if the organization provides poor systems and procedures, its overall intellectual capital will not reach its fullest potential. An organization with strong structural capital offers a supportive culture that allows individuals to try, fail, learn, and try again. In addition, organizing intellectual assets with information systems can turn individual know-how into group knowledge.

Relational capital is comprised of the knowledge embedded in customer and supplier relationships—knowledge of market channels and the information embedded in client files, for instance. Although many insurance executives recognize the importance of relational capital, they often have a difficult time tapping into the wealth of knowledge that exists in their own customer relational management databases. The knowledge embedded in an organization's network of relationships is a powerful vehicle for success. Understanding what customers want can be the difference between a leader and a follower.

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Measuring Up

One of the main challenges for harvesting intellectual capital lies with the issue of measurement. This is a difficult but not impossible challenge. Insurance companies have much of the data they need already. It really just boils down to knowing what is worth measuring and then knowing what the measured number actually means.

In a study conducted by the Institute for Intellectual Capital Research (IICR), twenty-five of the largest insurance companies in the U.S. participated in a data collection exercise for the purposes of understanding how to manage their intellectual capital more effectively. These companies had an average of 20,000+ employees each and more than \$10 billion in revenues.

There were two phases of data collection. The first phase required a sample of employees from each of the insurance com-

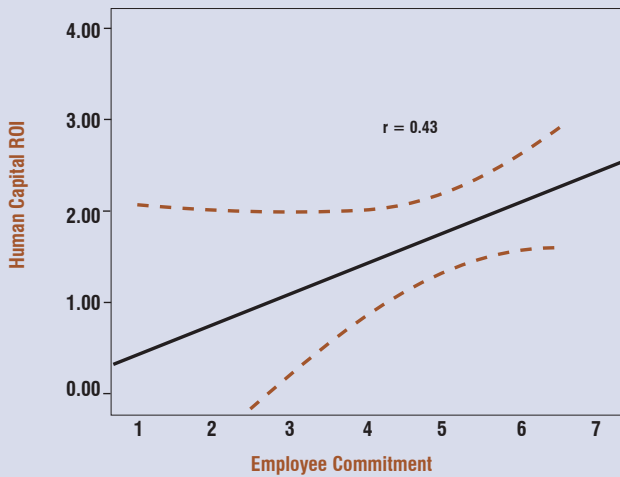
panies to complete a survey. This survey addressed a variety of softer issues such as employee satisfaction, knowledge generation, leadership and other constructs all related to intellectual capital development. The second phase of the study required the collection of financial and human capital data from each firm. This included financial figures related to revenue and profit as well as measures on the number of full-time equivalents (FTEs) in each insurance company plus turnover rates and training and development expenditures.

The results of this study yielded some very interesting results:

■ **Revenue Factor and T&D Investment.** Revenue Factor is measured by taking the company's total revenues and dividing it by the number of full-time equivalents. This figure ranged from about \$300k to \$900k per FTE for the sample of insurance companies studied. T&D Investment is measured by taking the total value of training and development expenditures and dividing it by the number of full-time equivalents. This figure ranged from about \$250 to about \$3,000 per FTE. Interestingly, these figures were positively correlated ($r = 0.57$) as expected. In other words, a relatively high investment in training and development for each employee was associated with higher revenue. In fact, every \$1 increase in T&D / FTE was equal to an increase of \$168 in revenue per employee (see Chart 1 on previous page).

■ **Income Factor and Voluntary Turnover.** Income Factor is measured by taking the company's total net income and dividing it by the number of full-time equivalents. This figure ranged from about \$2k to \$175k / FTE for the sample of insurance companies studied. Voluntary Turnover is measured by taking the total number of employees who voluntarily left the organization in the previous fiscal year and dividing it by the average headcount throughout the year. This figure ranged from about 6 percent to about 26 percent. Interestingly, these figures were negatively correlated ($r = -0.47$) as expected. In other words, a lower voluntary turnover rate was associated with higher income. In fact, every one percent decrease in voluntary turnover was equal to an increase of \$4,032 in income per employee.

■ **Human Capital ROI and Employee Commitment.** Human Capital ROI is measured by taking the company's total revenue less operating expenses net of compensation and benefits divided by

CHART 2

Higher employee commitment was associated with higher human capital ROI.

compensation and benefits [Revenue – (Operating Expenses – Compensation – Benefits)] / (Compensation + Benefits). This figure ranged from about 0.63 to 3.9 for the sample of insurance companies studied. Employee Commitment was measured by surveying a stratified sample of employees from each organization. This construct was represented by aggregating five survey items related to commitment and measured on a seven-point Likert-type scale (strong disagree to strongly agree). The average survey score ranged from about 3.2 to 6.6 on a scale of one to seven. Interestingly, these figures were positively correlated ($r = 0.43$) as expected. In other words, a higher score of employee commitment was associated with higher human capital ROI. In fact, every point increase in the survey was equal to an increase of 0.3 in human capital ROI. (see Chart 2).

Although this study only examined one fiscal period of data from a relatively small sample of firms, there is a clear, substantive and significant statistical association among these intellectual capital metrics. Taking these results, what should a manager (or CKO wannabe) at an insurance company do first to strategically manage its intellectual capital?

- Conduct an initial intellectual capital audit. Such an examination may include designing and administering a diagnostic survey using Likert-type scales to get a snapshot of the benchmark level of intellectual capital in existence. Contact the IICR for further information on sample surveys and indices that combine

both quantitative and qualitative metrics to help evaluate your firm's intellectual capital stocks and knowledge management flows.

- Make knowledge management a requirement for evaluation purposes for each employee and assign personal targets for intellectual capital development. For example, you might have each employee aim to learn something the organization

currently does not know. Be sure that each employee documents that knowledge into a searchable database or corporate yellow pages.

- Formally define the role of knowledge in your business and in your industry. Find and secure the greatest resources for intellectual capital inside and outside your firm from sources such as industry associations, academia, customers, suppliers, and the government. This also includes supporting the marketing department with a competitive intelligence strategy.
- Recruit a leader responsible for the development of intellectual capital. This person must have an integrated background in human resources, strategy, and IT. A CKO is different than a CLO. The former is responsible for how human capital can be leveraged for sustainable advantage, whereas the latter is responsible for developing and implementing the corporate training strategy.
- Classify your intellectual portfolio by producing a knowledge map of your organization. This means determining in which people and systems knowledge resides. For example, you could create a central database in which all project-based information can be accumulated and accessed.
- Use information systems and information-sharing tools that aid in knowledge exchange and codifying. Such tools include groupware, message boards, video-teleconferencing, intranets, knowledge exchanges, corporate universities, and storytelling. Visit www.knexa.com for a Web-based software solution

called Tribute that has been used by several insurance companies.

- Send employees to conferences and trade shows and have them spy. Do not pay for their travel unless they share what they learned with the rest of the organization when they return. Increase ROI on training.
- Consistently conduct intellectual capital audits to re-evaluate the organization's knowledge accumulation. Use monetary values if possible, but do not be afraid to develop customized indexes and metrics.
- Identify gaps that must be filled based on weaknesses relative to competitors, customers, suppliers, and best practices. Start benchmarking your turnover ratios and training investment rates in relation to a competitive set.
- Assemble the organization's knowledge portfolio in an intellectual capital report. Then make it an addendum to your company's annual report.

There is a long way to go before every insurance company can effectively manage its corporate knowledge, but the concept is here to stay. To that end, it might prove useful for academics to integrate the study of intellectual capital with the study of organizational learning. Similarly, HR managers should work closely with accounting and IT analysts to create a more useful managerial framework. Such networking of disciplines may be the first steps toward effectively managing the ultimate intangible asset.

About the Author:

Dr. Nick Bontis is an award-winning Associate Professor of Strategy at McMaster University and the Director of the Institute for Intellectual Capital Research. He is a well known consultant and professional keynote speaker and has worked with the insurance industry for several years. For further information go to www.NickBontis.com or contact him directly at nick@bontis.com.

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