

LINKING
**HUMAN CAPITAL
INVESTMENT**

INTELLECTUAL CAPITAL IS THE CURRENCY OF THE FUTURE AND YOUR ORGANIZATION'S MOST IMPORTANT ASSET. THOSE WHO LEARN HOW TO MANAGE IT EFFECTIVELY WILL REALIZE ACCELERATED PERFORMANCE AND ACHIEVE THE ULTIMATE COMPETITIVE ADVANTAGE.

WITH ORGANIZATIONAL PERFORMANCE

WHAT IS YOUR T&D/FTE COST?

THE INTANGIBLE FINANCIAL value embedded in 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 like Chief Knowledge Officer (CKO) and Chief Learning Officer (CLO) have been creeping into annual reports and job postings with increasing frequency. 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 C-level executive to be appointed with the responsibility of harvesting the intellectual capital potential of an organi-

zation 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. Initially targeting such external stakeholders as investment analysts, it was quickly identified as a novel and innovative measurement report. It contained a number of measures for providing insight into the intellectual performance of the company, including proxies for the training investment of employees, the adoption of new technology, turnover rates, computer literacy, and the number of new business ideas implemented, to name a few.

THE CAPACITY OF AN ENTERPRISE TO CREATE WEALTH WILL BE BASED PRIMARILY ON THE CAPABILITIES OF ITS PEOPLE.

INTELLECTUAL CAPITAL REPORT A LEADING INDICATOR OF FUTURE SUCCESS

Although the first iteration of the report in 1995 was positioned as an addendum to the official financial statements of the corporation, it 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 report was a leading indicator of future success.

Fast-forward to over a decade later, and companies 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 these questions: Why are some firms worth so much more than their book value? What specifically composes this intangible asset of intellectual capital?

In 1962, economist Fritz Machlup concluded that 35 % 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 before even selling one dollar's worth of product or service. The reason is that large corporations contain large and complex webs of human capital in the form of talent, experience, and innovative capabilities.

UNDERSTANDING TOBIN'S Q RATIO

The concept of Tobin's "q ratio" illustrates this significance. 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. For example, let's take Microsoft Corporation trading at about \$24 per share with 8.9 billion shares outstanding. The market value of this company is about \$213 billion. However, the book value, as detailed in the shareholder's equity section of the balance sheet, puts the company at \$37 billion. This means that Microsoft has a Tobin's q ratio of 5.76 ($213 \div 37$). In other words, the market is providing more than a five-times premium above and beyond what GAAP (generally accepted accounting principles) is assigning. Intellectual capital theory argues that a significant portion of that excess is a proxy for the intangible value that employee expertise brings to bear.

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.

BUSINESS SUCCESS BASED ON MANAGEMENT OF KNOWLEDGE ASSETS

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 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 in corporations? It means that the capacity to manage knowledge is a critical skill — perhaps the critical skill of this era. If there is one distinguishing feature of the new economy, it is the ascendancy of intellectual capital. Firms that thrive in this new environment see themselves as learning organizations, and they pursue the continuous improvement of their intellectual capital.

THE THREE COMPONENTS OF INTELLECTUAL CAPITAL

The field of intellectual capital has come a long way since the early days of Skandia's reports. Today, it is defined as encompassing three 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.

THE KNOWLEDGE EMBEDDED IN AN ORGANIZATION'S NETWORK OF RELATIONSHIPS IS A POWERFUL VEHICLE FOR SUCCESS.

It is not that simple, however, since organizational knowledge also exists in other forms, such as structural capital.

Structural capital is the knowledge left behind when employees go home. It consists of all the non-human storehouses of knowledge embedded in things like databases, procedures, filing cabinets, and routines. Structural capital deals with the mechanisms and structures of the organization that can help 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 full 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 the knowledge embedded in customer and supplier relationships, such as knowledge of market channels and the information embedded in client files. Although many 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 databases. The knowledge embedded in an organization's network of relationships is a powerful vehicle for success. Understanding what customers want can make the difference between a leader and a follower.

One of the main challenges for harvesting intellectual capital is its measurement. This is difficult but not impossible. Companies have much of the data they need already. It really 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), 25 of the largest insurance companies in the US participated in a two-phase data collection exercise for the purposes of understanding how to manage their intellectual capital more effectively. The first phase required a sample of employees from each of the insurance companies to complete a survey, which addressed a variety of softer issues — employee satisfaction, knowledge generation, leadership, and other constructs all related to intellectual capital development.

The second phase was the collection of financial and human capital data from each firm. These included financial figures related to revenue and profit as well as measures on the number of full-time equivalents (FTEs) in each company plus turnover rates and training and development (T&D) expenditures.

IICR STUDY YIELDS THREE KEY RESULTS

Figure 1: Revenue Factor and T&D Investment. Revenue Factor is measured by taking the company's total revenues and dividing it by the number of FTEs. This figure ranged from about \$300k to \$900k/FTE in the sample of insurance companies.

T&D Investment is measured by taking the total value of T&D expenditures and dividing it by the number of FTEs. This figure ranged from about \$250 to about \$3,000 per FTE. In other words, a relatively high investment in T&D 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.

Figure 2: Income Factor and Voluntary Turnover. Income Factor is measured by taking the company's total net income and dividing it by the number of FTEs. This figure ranged from about \$2k to \$175k/FTE in the sample of companies.

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% to about 26%. In other words, a lower voluntary turnover rate was associated with higher income. In fact, every 1% decrease in voluntary turnover was equal to an increase of \$4,032 in income per employee.

Figure 3: 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 compensation and benefits $[\text{Revenue} - (\text{Operating Expenses} - \text{Compensation} - \text{Benefits})] \div (\text{Compensation} + \text{Benefits})$. This ranged from 0.63 to 3.9 for the sample studied.

EVERY \$1 INCREASE IN T&D/FTE WAS EQUAL TO AN INCREASE OF \$168 IN REVENUE PER EMPLOYEE.

FIGURE 1 – T&D FTE

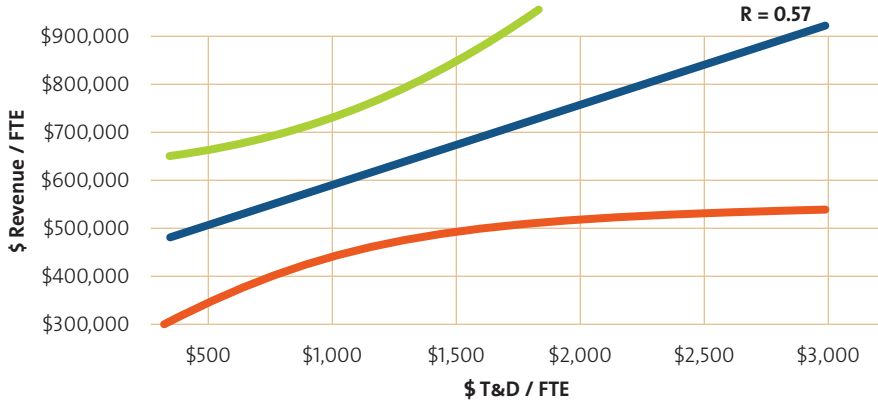


FIGURE 2 – VOLUNTARY TURNOVER

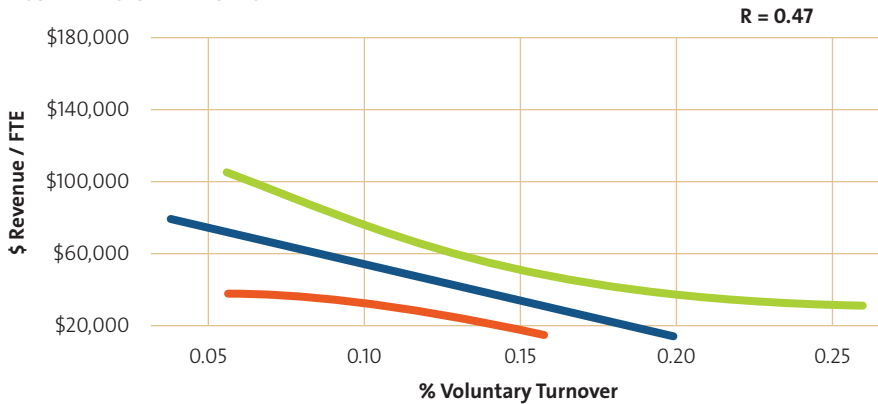
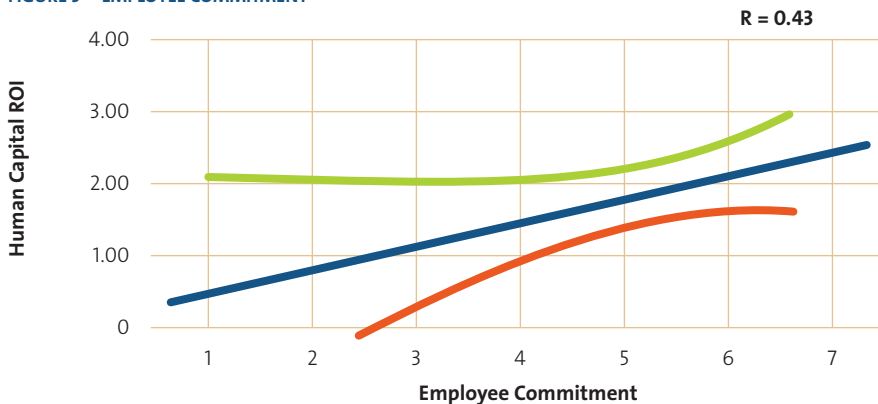


FIGURE 3 – EMPLOYEE COMMITMENT



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 (strongly disagree to strongly agree). The average survey score ranged from 3.2 to 6.6 on a 1–7 scale. 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.

Although this study examined only 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. Following these results, a manager or CKO should take these initiatives first to strategically manage their intellectual capital.

INITIATIVES TO STRATEGICALLY MANAGE INTELLECTUAL CAPITAL

1. 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.
2. Make knowledge management a requirement in evaluating each employee and assign personal targets for intellectual capital development. For example, have each employee learn something the organization

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currently does not know and document that knowledge into a searchable database or corporate yellow pages.

3. 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 such sources as industry associations, academia, customers, suppliers, and government. Also support the marketing department with a competitive intelligence strategy.

4. Recruit a leader responsible for developing intellectual capital. This person must have an integrated background in human resources, strategy, and IT. A Chief Knowledge Officer is different than a Chief Learning Officer: The former is responsible for how human capital can be leveraged for sustainable advantage; the latter is responsible for developing and implementing the corporate training strategy.

5. Classify your intellectual portfolio by producing a knowledge map of your organization. Determine where knowledge resides, in what specific people as well as systems. For example, create a central database in which all project-based information can be accumulated and accessed.

6. 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.

7. Send employees to conferences and trade shows. 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.

8. 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.

9. 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 compared with your competitors.

10. Assemble the organization's knowledge portfolio into an intellectual capital addendum to the annual report.

There is a long way to go before every organization can effectively manage their 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 should work closely with accounting and IT analysts to create a more useful managerial framework. Such networking of disciplines may be the first step toward effectively managing the ultimate intangible asset and realizing its financial benefits.

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