Knowledge Transfer: Measuring Best Practices

Speaker: Dr. Nick Bontis, McMaster University

Dr. Bontis is the world's leading expert on intellectual capital and its impact on performance and has recently been named as one of the Top 30 Management Gurus worldwide. He helps organizations leverage their most important intangible asset for sustainable competitive advantage. Nick has been immersed in the field since 1991 when a cover story in *Fortune* magazine, titled "Brainpower", changed the course of his life. Risking a secure future, Nick left a promising banking career to pursue a PhD in the field. His groundbreaking doctoral dissertation went on to become the #1 selling thesis in Canada. At a relatively young age, his accomplishments thus far could fill a volume.

As a professional speaker, Nick has delivered keynote presentations on every continent for leading organizations in both the private and the public sector. His dynamic, high-energy presentations provide personal and team recommendations for improving individual and organizational effectiveness leaving audiences with the tools, inspiration and impetus to accelerate performance. His customized programs are a mix of practical managerial tools, rigorous academic research, strategic consulting, entertaining humour and a blast of youthful exuberance.

As an academic, "Nicky B" (as he is known by his students) is an award-winning tenured professor who delivers enlightening content with energy that virtually zings off the walls when he steps into a room. He currently teaches strategy to undergraduates, knowledge management to MBAs, and advanced statistics to PhD students at the DeGroote School of Business, McMaster University. He has won over 12 major teaching awards including faculty researcher of the year. *Maclean's* magazine has rated him as one of McMaster's most popular professors for six years in a row! TVO recognized him as one of the top 10 lecturers in Ontario. OUSA awarded him Ontario's top professor. He is also a 3M National Teaching Fellow, an exclusive honour only bestowed upon the top university professors in the country!

Nick earned his PhD from the prestigious Ivey Business School, University of Western Ontario, where he received the University's top scholastic achievement award. He also won a Canadian silver medal in the running long jump, with a remarkable leap of seven and half metres—that's nearly 25 feet! Nick also competed on the UWO varsity men's soccer team, receiving both MVP and leading goal-scorer honours. As an athlete, Nick received national all-star status and several high-profile awards, all while performing in the UWO symphony band as a euphonium player.

As a consultant, Dr. Bontis is the director of the Institute for Intellectual Capital Research—a leading strategic management consulting firm. His services have been sought by leading

organizations such as the United Nations, Microsoft, Health Canada, Royal Bank, Telus, Accenture, the US Navy and IBM. Tom Stewart, former Editor of the *Harvard Business Review*, recognizes him as a "pioneer and one of the world's real intellectual capital experts". Nick is also on the Advisory Board of several organizations, including a variety of educational-based institutions designing and implementing executive development programs across the country.
As a writer, Nick is associate editor of the *Journal of Intellectual Capital* and author of *Information Bombardment: Rising above the digital onslaught*. He has won international acclaim for his leading-edge research, books and management cases. He is ranked as one of the most cited authors on intellectual capital and knowledge management in the world. As an entrepreneur, Nick is chief knowledge officer of Knexa Solutions—the world's first knowledge exchange and auction, based in Vancouver. A Canadian and US patent application has been filed for Knexa's dynamic pricing system. Dr. Bontis also draws on his wealth of practical, hands-on business experience. He started his career at Human Resources Development Canada and later at KPMG. He then moved on to work for several years at CIBC Securities Inc. in a variety of areas including marketing, securities analysis, recruitment, strategy, and software development. He received the CIBC Chairman's Award for outstanding contribution to the bank.

With his unique combination of substance and sizzle, Dr. Bontis is guaranteed to ignite, entertain and enlighten audiences, empowering them with both the tools and the inspiration to perform at a higher level of accelerated performance. He currently resides in Ancaster, Ontario with his wife Stacy and their three young children Charlie, Dino and Tia Maria.

Intellectual Capital

Five Ways to Keep it From Walking Out the Door

FACE THE FACTS, employees are going to leave their current jobs and your organization, no matter what. You can have the best corporate culture, stock options and benefits on the block but the reality is people move across the country and seek out new industries. Just think of all those baby boomers who are planning their retirement right now. While retaining employees is important in today's business climate, retaining the knowledge of your employees is even more critical. It is essential to create and enforce a plan to ease the threat of your valuable organizational knowledge from leaving your company.

By Nick Bontis

PLAN

Succession planning must be implemented for all employees in the organization. That includes everyone from the CEO down to the call-centre representative. If an employee has a known trajectory for departure—retirement, back to school, maternity leave—a replacement hire must be made early enough to allow for job shadowing to occur. The rule of thumb is to allow one week of job shadowing for each year of employment. Indeed, there is a financial cost for having two people do the same job for a short period. But, the opportunity cost of not having knowledge continuity in place is even worse.

DEVELOP

Develop a corporate online Yellow Pages. In other words, find out and classify who knows what. In this exercise, the talent and expertise of every single employee should be documented in a searchable file that resides on the company's intranet. This way, when you are looking for important information or a key contact, you can just type in a search term and zap, you know exactly who to go to for the answer. Don't forget, we typically waste more than 25 per cent of our time at work looking for answers to questions that someone else in the company already has.

COMMUNICATE

Exit interviews are a must for every single departing employee. The biggest mistake companies make is having someone from HR conduct the interview. The best way is to hire an independent firm to conduct the interview by phone and collect further information using an online survey. The departing employee will be more honest with an interviewer they have no ties to and at the same time, you protect sensitive data. Once the vendor collects information from five or more departing employees, results can be reported back to the organization in aggregate, thereby ensuring confidentiality. And don't forget that the most important question to ask in an exit interview is: what do you know that nobody else in the firm knows?

CREATE

A very hot trend right now is to develop an alumni database of all former employees. Universities do it, so why can't businesses? These past employees can become a huge source of intellectual capital for your organization. You can use them for focus groups, as test clients, as secret shoppers and you can even bounce ideas off them before new services hit the market. By maintaining a useful relationship with alumni, they might come back again in the future as employees.

ENFORCE

An enormous risk for knowledge-intensive organizations is the threat of departing employees taking critical files with them (e.g., client lists, blueprints, marketing plans). Information ownership and usage policies must be communicated to current employees so they clearly understand who owns

Retention

your company's data. It is important for this issue to be addressed explicitly during the orientation of new employees. Have in your arsenal non-competition and non-solicitation agreements or clauses in employment contracts and when employees join your firm, make them sign it.

At the end of the day, it's your intellectual capital that can make or break your organization's performance. Be sure to safeguard it.

Dr. Nick Bontis (nick@bontis.com) is professor of strategy at the DeGroote School of Business at McMaster University in Hamilton. He is a globally recognized leader, management consultant and professional speaker in the areas of intellectual capital, knowledge management and organizational learning.

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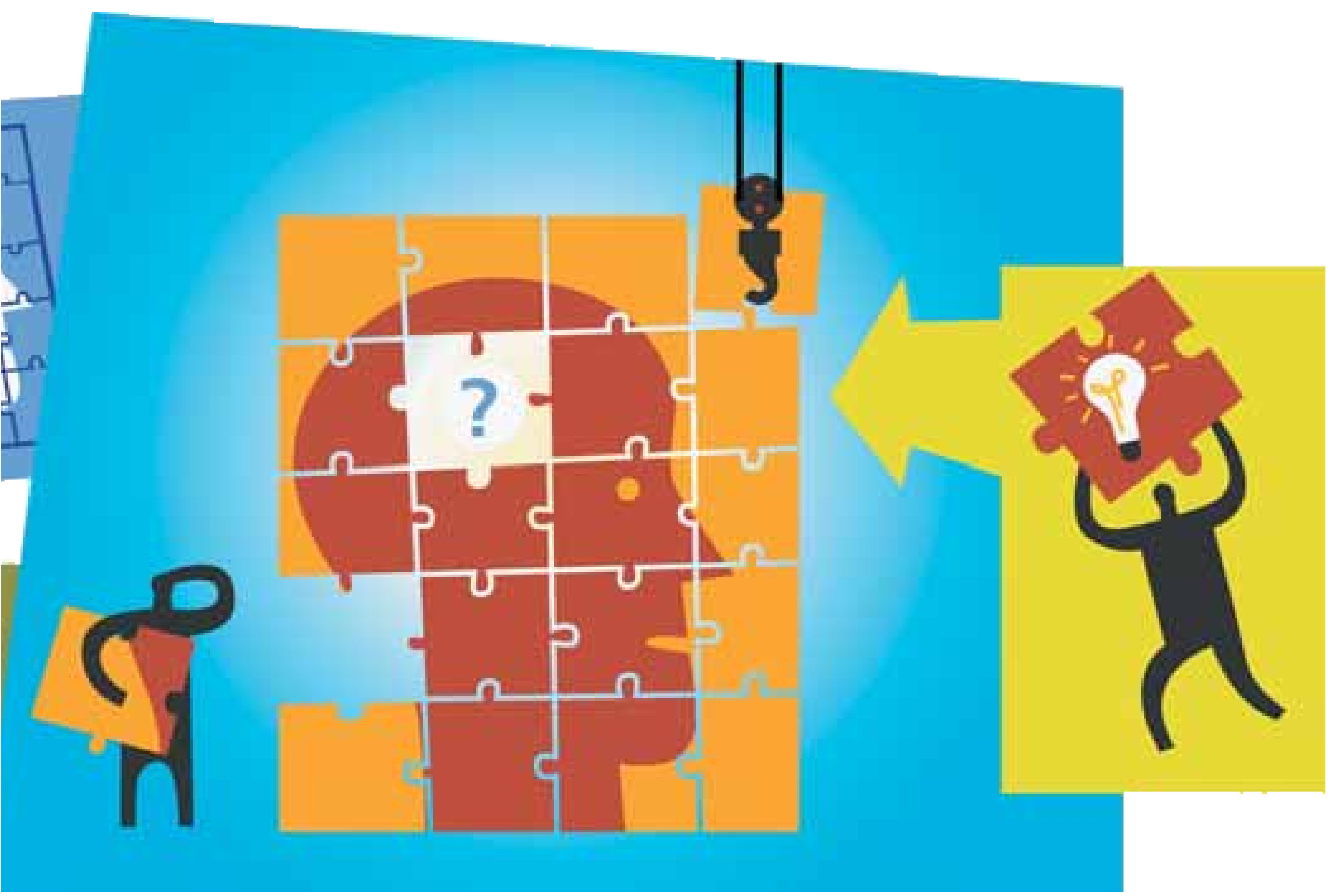
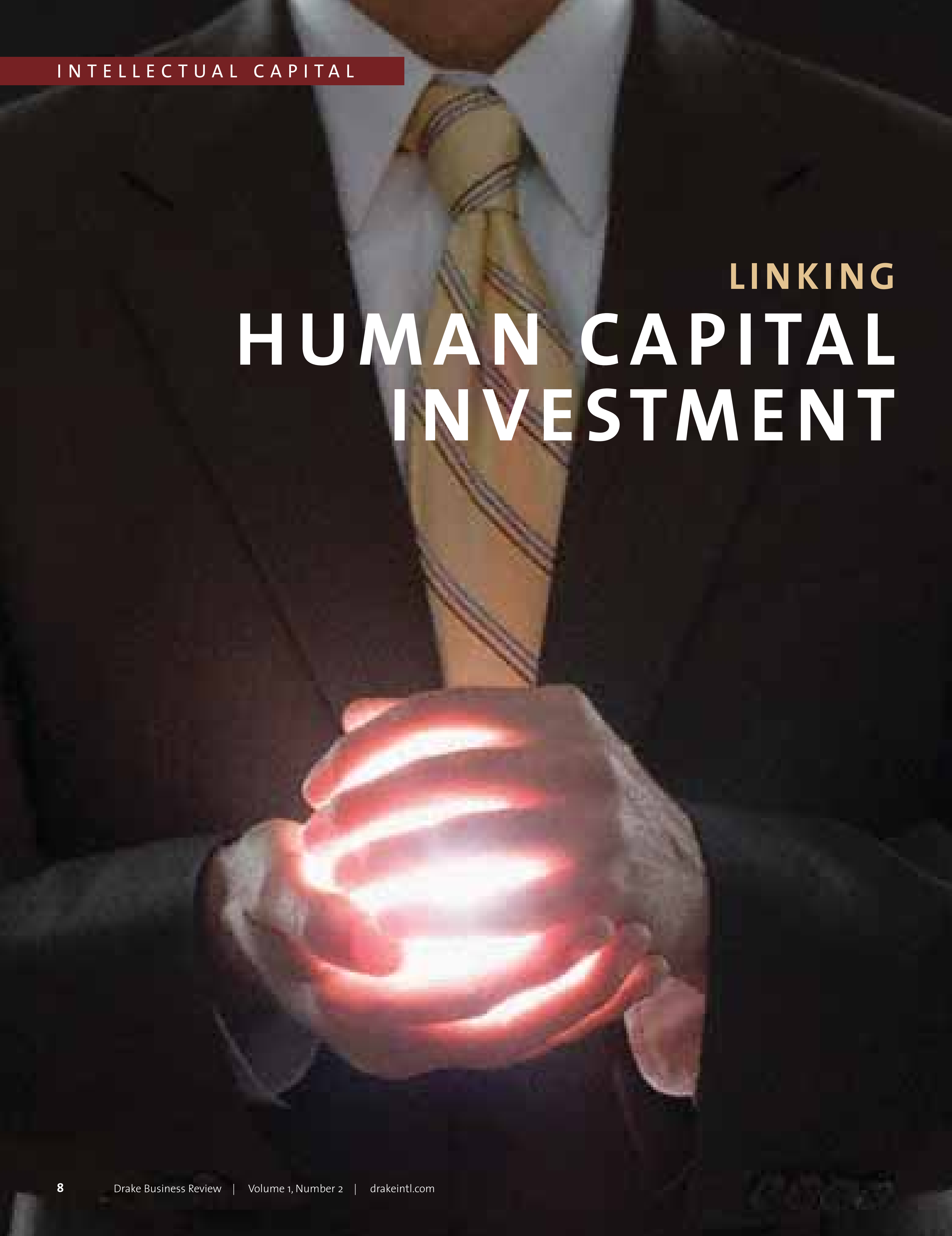


LINKING HUMAN CAPITAL INVESTMENT



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 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. 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 ÷ 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 [Revenue – (Operating Expenses – Compensation – Benefits)] ÷ (Compensation + 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

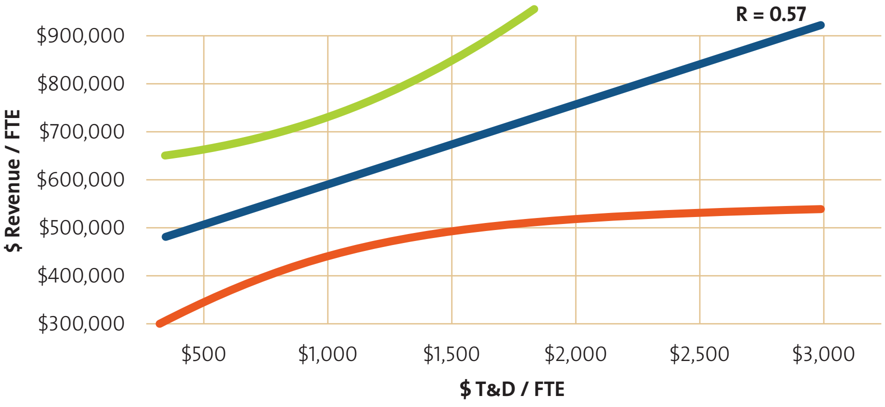


FIGURE 2 – VOLUNTARY TURNOVER

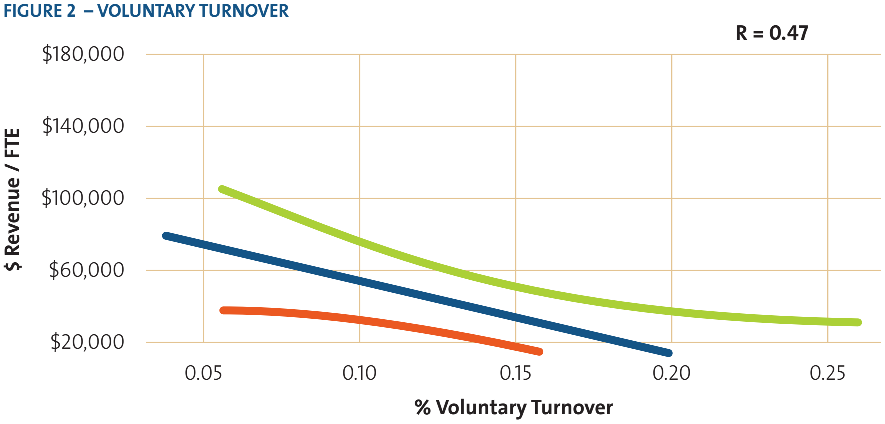
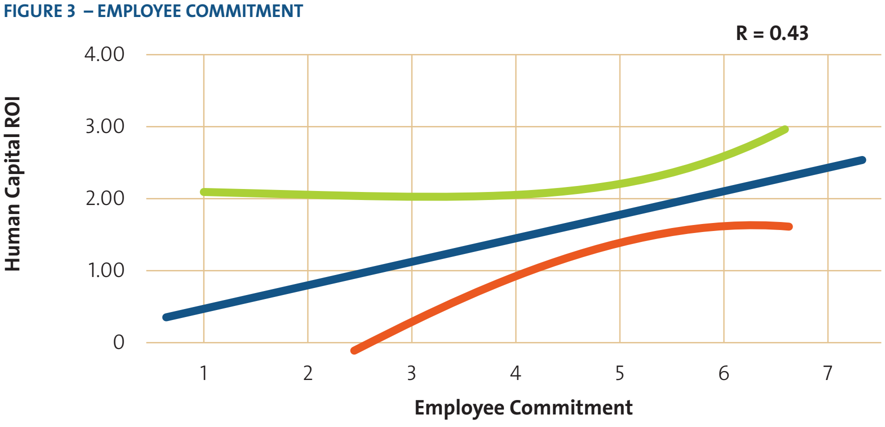


FIGURE 3 – EMPLOYEE COMMITMENT



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

EVERY 1% DECREASE IN VOLUNTARY TURNOVER WAS EQUAL TO AN INCREASE OF $4,032 IN INCOME PER EMPLOYEE.

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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Dr. Nick Bontis is award-winning Associate Professor of Strategy at McMaster University and the Director of the Institute for Intellectual Capital Research. He was recently awarded the 3M National Teaching Fellow, an exclusive honour bestowed on the top university professors in Canada. He is a well-known consultant and professional keynote speaker and has worked with a variety of industries and government clients. For further information go to www.NickBontis.com or contact him directly at nick@bontis.com.