

An interview with Thomas A. Stewart

Interview by Samuel M. Felton, William C. Finnie



In June 1991, Tom Stewart wrote an eye-opening article in *Fortune*, “Brainpower: How Intellectual Capital is Becoming America's Most Important Asset”, that helped change how many managers organized to compete and create value.

Then, his path-finding book, *Intellectual Capital: The New Wealth of Organizations* (1997) demonstrated that knowledge is the most important factor of production in the modern economy and a key to achieving competitive advantage. Acceptance of the concept was rapid, and a growing number of organizations started to apply Stewart's principles of intellectual capital and knowledge management to improve performance and create value. Unfortunately, some firms rushed to embrace the concepts but failed to think through the business reasons for doing so.

His latest book, *The Wealth of Knowledge: Intellectual Capital and the 21st Century Organization* (2001) builds on Stewart's earlier concepts while offering practical ways of putting these ideas into practice in today's hyper-competitive world. It stresses the importance of having a business case for knowledge that clearly contributes to profits. The book offers practical advice for converting knowledge into intellectual capital and leveraging it for competitive advantage. Another plus in this equation, according to Stewart, “Investment in intellectual capital almost invariably provokes further complementary investments, producing a self-feeding circle of investment and value creation”.

Sam Felton: How would you assess the current state of the practice of knowledge management?

Tom Stewart:

Knowledge management steered itself into a bad patch, but seems to be regaining a productive road. The discipline got caught up in a software vendor and consulting firm sales frenzy. It also suffered guilt by association with the Internet bubble and by its connection with the idea of the new economy. During that sales frenzy, people undertook it because it was in vogue rather than for business reasons. Five years ago an analyst at Forrester Research reported that six out of seven knowledge management projects were being undertaken without anybody ever having asked for, or anyone offering, a promised return on investment. The analyst's message was, “This won't last, guys. So figure out how to get an ROI or get out”. My urgent message: if you don't know why you're doing knowledge management, you shouldn't be doing it.

Felton: How, then, are we doing on that score?

Stewart:

Not well enough, yet. Whenever you have an interesting new idea like re-engineering or total quality management or any rich idea with a discipline around it, people start undertaking it for its own sake, partly to join the crowd and partly as a way of learning about it. That's the way some minds, even very good ones, work: Jump in first, think later. Let's create a chief knowledge officer. Let's form a knowledge management task force.

To apply knowledge management ideas and tools to solve business problems, you have to first identify the business problems. This is one of the lessons of my new book, *The Wealth of Knowledge*. You shouldn't undertake knowledge management until you have identified your company's knowledge business. If you start by identifying the role of knowledge in making money in your business, then you can start surfacing the key issues that you will need to deal with.

William Finnie: This brings us to measurement. What companies are doing a good job of knowledge measurement and linking knowledge to ROI? And what are some of the knowledge measurement tools that work for them?

Stewart:

It's hard to find many examples of companies that are doing a good job of measuring the gains from knowledge management. Most companies that do, link the money flows to the project rather than to knowledge management or intellectual capital per se. For example, British Petroleum says its knowledge management efforts have earned it \$700 million. They get that figure by adding up the savings or other gains from specific projects, such as using knowledge management to save money in the spring-cleaning job called a "refinery turnaround". A balanced scorecard approach is another perfectly good way to measure the non-financial value of knowledge.

There's value in going beyond such measurements and trying to put a value on intangible assets, too. It's worthwhile to try to value knowledge assets in financial terms because that's a way of focusing people's attention. At a recent conference, Walter Kiechel, the editorial director of Harvard Business School Publishing, asked the 700 attendees, "What is most crucial to the success of your company? Is it the tangible assets including the financial assets and plant and equipment? Or is it knowledge, the skills of the people, and other intangible assets?". The vote was unanimous. Not one hand was raised saying that it's the hard assets that determine the success or failure of a company.

Finnie: What accounts for the fact that a recent Bain Management Tools and Techniques survey ranks the usage and satisfaction of knowledge management so low?

Stewart:

Partly, I attribute the high level of dissatisfaction with knowledge management to the way it was marketed and used. It was bought and sold as a software problem, not a management problem. The vendor community tried to ride a fad rather than create new approaches to a new business opportunity. If you go to the expos, you see the same big vendors with the same booths. Every year the signs say that they have the definitive solution to this year's fad problem. I sometimes wonder whether they simply put new labels on the old software and change the interface a little bit.

Now, it's the buyer's job to say "no", not the seller's. A lot of firms bought the idea that if they just throw up an intranet, then people will populate it with profound documents and before too long knowledge will be managed within the organization. It doesn't work that way. People are now learning that the knowledge management concept is useful but hard to implement.

Finnie: In your latest book, you say that the technology rather than human resource people dominate knowledge management. Why is that? Shouldn't the HR managers be working closely with the knowledge management managers so that knowledge management reflects both the capabilities of technology and the insights and drive of HR?

Stewart:

Of course knowledge management should reflect both. But it should be driven by the business. Management should call on information systems and HR as needed and as appropriate. A problem that HR has always had institutionally is that it is selling human nature and that doesn't change. IS is selling technology and that does change. Advertising people say that "New" is the single most powerful word in their world, and HR can't use it. Staff functions are crucially important, but they are enablers. And the question is, enablers of what?

Felton: I assume you saw Greg Ip's article in the Wall Street Journal recently on how intangible assets can vanish, almost over night. What are your thoughts on his point?

Stewart:

The thesis at the beginning of that article differed from its core point. It started by saying intangible assets are ephemeral and evanescent and can disappear very quickly. But the rest of the piece argued that these assets are becoming more and more of an explainer of how companies perform and what they do. I don't buy the argument that the fact that something is intangible means that it is fragile and ephemeral. If you were to believe that, you would believe that Microsoft could disappear overnight. Houses of cards built on dubious and perhaps fraudulent accounting tend to collapse overnight. But if you want to see collapsing values, look at the telecoms. They bought too much in the way of fibre and tangible assets. And when their business went "poof", it's not their intangibles that disappeared, but the value of their tangible assets.

Or look at the argument from the other side: What is more intangible than corporate culture and what is harder to change? Everybody who has ever tried to do a change management job has said culture is the most stubborn problem. You can change the desks, you can change the office, you can change the plant, you can change the machines, you can replace the people, but one intangible, the culture, persists.

Felton: In some of your recent "Barely Managing" columns [in *Business 2.0*] you talk

about surviving in today's economic doldrums and how you can create new businesses from knowledge assets that you already have, if you coordinate them the right way. That is an intriguing approach to dealing with tough times. Would you expand on it?

Stewart:

Sure – but let me add that those columns built on work done by Adrian Slywotzy and Rich Wise at Mercer. Still, all of us concerned with intellectual capital believe that knowledge assets provide a platform for new business. One of my favourite stories in my book is about Neal Workman and his little company, Seafax, which started out as a debt collection business for Maine's fishermen. Getting customers to pay their bills is a big problem for the fishermen because they are small businessmen without a lot of market power. Some of their customers are very big, like Disney. Many customers are restaurants – an industry where bankruptcy and credit problems are common. And a fisherman can't repossess his inventory. An interesting set of problems. Workman discovered was that, in addition to the physical act of collecting over-due bills, there was a whole flow of knowledge and information that he had to collect. Who was a bad credit risk? Who was paying their bills? What is the name of the guy at Joe's Restaurant or some large buyer who actually cut the checks? Out of that, Workman created a whole series of new businesses.

The first was a business built on the theory that an ounce of prevention is worth a pound of cure. He sold a list that warned, "Don't sell to these guys because they're not paying their bills". And by the way, he used this list as a club against deadbeats: Pay up or you'll go on the list and no one will sell to you. He also started creating reports of people who do pay their bills. Another list became a "yellow pages" for the whole seafood industry.

“Somebody at a major oil company said, I never use the term knowledge management – I just ask what's your problem, how can I help? People don't necessarily have to use the label before they do it.”

The point is, in the ordinary course of business, companies always are creating intangible assets. In the case of this company, the database could

be used not only to operate the debt collecting business, which still goes on, but also to create other and new businesses. The deadbeat list, the credit reports, the Yellow Pages are all products of the same asset. The message is – in tough times, when money is short – look at key assets you already have, such as a list of customers. What are the businesses that you can pull out of your knowledge assets?

One of the attributes of knowledge is that you can package it and repackage it. Knowledge, like electricity, can do all kinds of work. Other assets tend to be much more specific, while knowledge products and information can be used for multiple purposes. You can wrap them up and sell them in different packages.

Felton: Your book suggests that entrepreneurial managers examine their customers' value chain for possible opportunities to create new services or new businesses.

Stewart:

The oldest insight in the world is that demand is generated outside the company and not inside it. It's so easy, particularly when you're trying to do something new, to think about its internal use first. For example, the big consulting firms got very excited by knowledge management, since it so clearly fit them. "We're the ultimate knowledge intensive business", they said. "The only thing we sell is knowledge. So let's set up our own knowledge database and we'll be our own best example of what we do". Some of the databases worked extremely well. Some of them worked less well. But they were internal systems. Such technology might improve the consultants' operational efficiency and productivity. These are good and valuable purposes, but they are not the same as garnering new wealth and new business. Those come from looking at what your customers need or what you can do upstream or downstream that creates value for a potential customer.

Felton: Tell us about tacit intangible assets.

Stewart:

Learning to manage tacit knowledge is absolutely crucial. There's an important distinction between explicit and tacit knowledge. Explicit means "it is opened" – explicit knowledge can be unfolded, opened, passed around. Tacit means silent. We all know things that we can't put into words, and we know things we don't even know we know. If you asked me to tell you everything I know about the magazine business, I couldn't possibly give you a brain dump that would be comprehensive. I could only sketch what I know. I would be leaving

a lot out, and I'd get tired or frustrated or would wonder why you want this information. There's also a lot of knowledge I know that I'm willing to share, but I might need to be prompted to supply it.

Too often, technologically driven knowledge management is overly enamored with the idea of creating encyclopedias or databases of lessons learned or templates. All of these are explicit knowledge and all can be extremely valuable. But knowledge management technologies tend to be less successful at collecting and sorting latent or passive knowledge.

One of my favourite stories in the book came from Nippon Roche, the Japanese subsidiary of the global pharmaceutical company. Their problem: too many old drugs, which tend to have declining sales, and too few new drugs in the research pipeline. One of their assets was a group of 24 medical representatives who were much better at selling drugs than their other sales people. They faced a classic knowledge management problem: How to transfer the knowledge in the heads of these super salesmen to all the other sales people. By doing this, they could improve sales and buy time until new drugs came in. That was the business problem.

Working with Jiro Nonaka, they asked, "What's the knowledge problem?". They decided there were four different kinds of knowledge involved: product knowledge, targeting, selling, and the ability to make appointments (the art of sitting down with the right buyer at the right time). The first three kinds of knowledge can be improved by training. You could figure out in explicit terms what separated the skillful people from the less effective people. But the super salesmen's knack of getting appointments was a black box. The best medical representatives were able to get into see people no one else could. Nobody could figure out how – not even the people themselves could describe what they did. So Roche sent these people out in teams of three to the various sales districts for a month at a time basically just to kibbutz and hang out, go drinking, and go on calls. *[Editor's note: Ikujiro Nonaka is Dean of the School of Knowledge Science at the Japan Advanced Institute of Science and Technology, a chaired professor at the University of California, Berkeley, Haas School of Business, and co-author of the highly acclaimed The Knowledge-Creating Company (Oxford University Press, 1995)]*

By osmosis, the knack transferred. At the end of a few months, the other sales reps were saying, "I find it much easier to make appointments. I'm much more comfortable calling people. I'm getting better bookings". Sales turned around. It's a classic example of the value of tacit knowledge.

Felton: Let's look ahead a few years and speculate on how the practice of leveraging intellectual assets will develop. What's going to be different? What will best practices look like?

Stewart:

Let's start with the question of measurement. The evolution of measurement is going to be interesting to watch over the next few years. The appointment of Bob Herz to FASB [Financial Accounting Standards Board] bodes well for the measurement and accounting of intangible assets. He's from PricewaterhouseCoopers and is co-author of *The Value Reporting Revolution: Moving Beyond the Earnings Game*.

Accounting is and ought to be a conservative profession. However, with changes at FASB, and the fallout from the accounting scandals of this year at Enron and elsewhere, I think we will see acceptance of the need for public reporting of companies' intangible assets. It will be slow, and companies will resist revealing more than name, rank and serial number unless they're forced by regulation. The lesson I take from Enron is that the market for snake oil grows when people don't trust doctors. New measurement schemes won't be implemented until people realize that generally accepted accounting principles aren't giving them what they need.

We're going to see change in management reporting, too. We are seeing more and more companies operating in real time. In these companies, management can see their companies running almost the way an open-heart surgeon can see the heart beating. That is going to change the art of management in a lot of ways. We went through a kind of crystal methamphetamine phase in the economy with "Internet time" and all of this speed, speed, speed stuff. It got a little hysterical, but we have seen a fundamental acceleration of the clock speed of organizations and of the economy. One effect will be to increase the visibility of the importance of knowledge and information. One of the interesting lessons in this last downturn was to see how fast people cut production, inventory, and payroll. Managers cut inventory and changed prices extremely rapidly because information was there fast – in some cases, at the end of the day.

The speed with which companies responded to bad news is an indication of this ratcheting up of the rate at which companies work, and a demonstration of the economic value of real time information, and of information in general. In broad terms, knowledge assets can be built and deployed a lot faster than physical assets. Just look at the corporate catastrophes suffered during the attacks on September 11. Their offices are gone but those companies were up and

running in a few days – in some cases, in moments. It was an astounding demonstration that the real assets of those companies were people and knowledge. Thank goodness the rolodexes and files were backed up on computers in places other than lower Manhattan.

A lot of companies, understandably, are now emphasizing security and back up, by asking how to protect their information and knowledge assets, how to protect their networks, and how to know where their people are. At the World Economic Forum in 2002, a couple of people said the first lesson from September 11 is to know where everybody is at all times. That's the security response. When we get beyond the security response, we get to the "What positive things can we do with all of this?". response. Somebody else said, "As a financial services company, what we learn from complying with money laundering statutes will allow us to do customer relationship management right, because we'll finally have a full picture of every one of our customers". All of this stuff has made people much more aware of the value of their knowledge and much more aware of how to manage, collect, and protect both that knowledge and the people who create and embody it. As we move forward, I think we will be seeing an explicit recognition that deploying and redeploying people and knowledge leads to the fastest growth.

Finnie: Can the phrase "knowledge management" be a turn off? In your 1999 *Fortune* interview, Jack Welch cited four responsibilities of his job. In your book you say three and a half of those are knowledge related. But the index of his book, *Jack: Straight From The Gut*, doesn't include "intellectual capital" or "knowledge management". Are those terms a turn off?

Stewart:

It can be. At one point, intellectual capital was on the GE values list. "Prize global intellectual capital and the people that provide it". Jack has always liked the phrase. But it can sound obscure or it can sound irrelevant. Somebody at a major oil company said, I never use the term knowledge management – I just ask what's your problem, how can I help? People don't necessarily have to use the label before they do it.

Finnie: In his book, Jack Welch focuses on concepts like workout and boundarylessness and other ways of speeding up processes and sharing knowledge at General Electric.

Stewart:

That's what knowledge management is all about. Every year, GE is listed as one of the top knowledge companies in the world. They never use the term though they do have a chief learning officer. GE started tracking best practices in other industries around 1991. They hired their own internal people and worked with The Boston Consulting Group. They went to companies like AMP and Wal-Mart, and said, what do you do? Can we go to school on you and can you go to school on us? It was a huge effort. Then they started doing the same process internally: This is what GE groups like Appliances can learn from Lighting and Lighting can learn from GE Capital and so forth. This is true knowledge sharing, but they never called it knowledge management. They networked the organization by moving people around and by means of training courses, technical councils, and executive councils. As a result, their managers know each other very well. They never called that knowledge management, either, but it is.

Finnie: In your "Do's and Don'ts for Effective Knowledge Management" you urge companies to "Deal fully with the obstacles to sharing knowledge inside the organization".

Stewart:

Let me expand on that. If we are colleagues who don't know each other well, you might call me and say, "Tom, I understand that you're an expert on purple colored widgets. Can you help me?". There are a lot of back-stories behind this simple exchange. The first question is, what are the things that might have inhibited you from making that call in the first place? You might not have known who I was. It might have taken you months to find out who knew the most about purple widgets. You might have been inhibited because I might have a reputation for being unapproachable, tyrannical, rude, and horrible. Or perhaps asking for information is just not done around here so you might be afraid that your boss would slap your wrist if you approached me.

Then think about the things that might inhibit me from answering you. Who the hell are you? What are you going to do with this information? Are you going to give me credit? Are you going to distort it or use it in some other way that I don't like or will cause my department embarrassment? How much do you know? How long is it going to take me to bring you up to speed? Will my boss chew me out for wasting valuable time or for revealing the recipe for our secret sauce? Even before you get to the reality that knowledge is power, there are a whole lot of very human questions that come up in any knowledge sharing. It's very important for companies to recognize them.

GE uses networks to break down a lot of barriers. And they have a culture in which question asking is encouraged.

Felton: What is the role of incentives systems in knowledge management?

Stewart:

Bob Buckman, CEO of Buckman Labs used to say that the single most powerful incentive that exists is promotion. And the single most powerful disincentive is dismissal or exile to corporate Siberia. Make it clear that the way you get ahead in the company is by being generous with what you know and greedy to learn what other people know. You have to be both generous and greedy. That should define your career path.

1. Start with the business problem or business opportunity. The idea is to improve something or create new value. So start with the business itself and the role of knowledge in the business and work from there.

2. Focus your knowledge building on the three tools that justify the investment:

a. In-house Yellow Pages: This simple system connects inquirers to experts and experience you can use, reduces errors and guesswork, and prevents the reinvention of countless wheels is the “killer app” of knowledge.

b. Lessons learned: Insist that no project is complete until an hour or so is spent providing insights into what went right and wrong and guidelines for others undertaking similar projects. Allow access via the company intranet.

c. Competitor intelligence: Organize your database of customers, competitors, and suppliers so that they are searchable and widely accessible and in a consistent format.

3. Use technology to its fullest, but don't use it in lieu of human contact. In particular, don't rely on databases, encyclopedias, and libraries if you don't have “librarians” who can help you navigate through all this stuff and find what you want.

4. Share with people how the company makes money. The depths of economic ignorance are remarkable and really surprising. Too many people don't even know the difference between gross margin and profit.

5. Deal fully with the obstacles to sharing knowledge inside the organization.

6. Get learning out of the classroom and into the marketplace. Action learning with project teams is a very powerful way to learn-and a successful project makes or saves money.

7. Speed up knowledge flows. Encourage interactions via e-mail, water cooler conversations, in-house training programmes, management retreats, cross-functional projects, and sharing best practices across business units.

8. Don't manage knowledge for the sake of managing knowledge. The idea is to make money, not to improve IQ points.

9. Leverage the knowledge you have. You want to avoid “reinventing the wheel”. But you don't do that by creating a gigantic repository containing the specs for every wheel ever invented, back to Fred Flintstone's. The most important function of knowledge management systems should be connection (of people to people, of questions, of sources, of answers) not collection.

10. Everybody says, “Technology is an enabler”. So is an alcoholic's spouse. Don't even think about knowledge management or KM technology until you clearly know what it is you are trying to enable. □