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Intangible Capital: Looking Inside the Black Box

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The management team was sitting around the conference room table once again. They had been able to deliver incremental growth despite the challenging economy. But they knew there was room for dramatic growth in their market. And they knew that a big part of the problem was headcount in the field where their territory managers advocate for their product and services to referral sources inside hospitals. Every year they would try to get more headcount from their corporate parent. They would re-write the request in a different way each time. But they weren't satisfied with this approach. What was the optimal way to scale their business? Was headcount the right lever?

They had a complex organization. The staff had ten years of average tenure so they knew the company inside and out. But they found it hard to get beyond the complexity and explain the challenge and the opportunity to their parent. They didn't know where to start. There are a lot of management teams in a lot of conference rooms around the world today with the same dilemma. They want to grow and they don't know where to start. They have an intuitive understanding of their business but lack the right vocabulary and models to explain how things really work. This article suggests a place to start, a new skills set that can help move our thinking into the 21st century, into the knowledge economy where the rules of growth and scaling have changed dramatically.

During our lifetimes, the global economy has been in the process of the kind of shift that has only happened a few times in human history. This comes as no surprise to the corporate strategist. The progression from an agrarian to an industrial to a knowledge society is something we all take for granted. Yet this shift is still so new that we often lose sight of its significance. And we are all so busy doing our jobs and living our lives that we rarely take a step back and ask what these changes mean to what we do every day.

The truth is that the basic infrastructure of our economy—financial systems, accounting, corporate structures and management tools—has yet to catch up with the underlying economic changes. This means that the average businessperson is navigating the challenges of the knowledge era using a toolset optimized for the industrial era. As the global economy (hopefully) emerges from the great recession of 2009, it will become more and more important for corporate strategists to move their toolset into the 21st century. This article will explain how to align your approaches with the realities of the knowledge era and provide you with practical tools to identify, optimize and measure the knowledge side of business—which is key to performance and competitive advantage in today's economy.



The Black Box

Until the 1980's the value of companies tracked the book value of their tangible assets very closely. Things changes when the use of PC's and information networks enabled companies to capture, manipulate and move data faster than ever before. The cost of the computers had nothing to do with the value of the knowledge that was created inside them. This trend accelerated with the advent of the internet 15 years ago.

Today the average company's hard assets make up less than a third of its overall value. An Ernst & Young study that looked at the merger transactions around the world and in all industries in 2007 found that only 30% of the average purchase price was tangible. The rest was intangible, breaking down to 23% identified intangibles (such as customer lists and brands) and 47% goodwill. This data is reinforced by stock market and macroeconomic studies of corporate spending. It is absolutely clear that anywhere from 50-70% is not only intangible but, in many cases, unidentified.

This means that to management teams, boards of directors, investors, bankers and stakeholders of all kinds, the average business today is a "black box." People can describe it. They talk about it. But they cannot provide hard data that answers even basic questions about where an organization has invested its money and how well the investment is working.

This black box presents a problem. Lack of good information leads to suboptimal pricing of companies in the markets and in M&A. It means that more decisions than anyone cares to admit are made based on intuitive understanding of intangibles rather than hard data. This leaves a lot of room for error in thinking, planning and communicating with stakeholders.

Could we be doing better? Absolutely. A lot of great work has been done by academics that can serve as a guide to strategists. In the book *Intangible Capital* that I recently co-authored with Michael Oleksak, we lay out a three-part introduction to the best thinking on how to manage the intangibles that are driving performance and competitive advantage in today's business. These are described below through the eyes of a corporate strategist followed by a discussion of how these changes will continue to challenge the strategy process itself.

Seeing Inside the Black Box: The New Factory

So if the intangible side of business is a black box, what is inside? For this, we have found the basic structure put forth by academics in the field of intangible/intellectual capital to be very useful. This view identifies four basic "homes" for knowledge in an organization:

- Human capital is a source of knowledge and the catalyst for creation of new knowledge. Certain kinds of knowledge, experience and competencies are (and will always be) inside of peoples' heads
- Relationship capital is a source of new knowledge as well as the means of monetizing knowledge. Certain kinds of shared knowledge are (and will always be) inside of your shared resources and relationships. Brands are a subcategory of relationship capital.



- Structural capital is the knowledge that gets captured and leveraged into re-usable forms that fuel growth and innovation. These include processes (many enabled by information technology), databases, training materials and intellectual property. This operationalized knowledge is highly scalable.
- Business recipe is the way that an organization combines these three types of knowledge assets with its physical and financial assets—and connects it all with a market need.

The quickest way to connect these concepts with your own organization is to take a quick inventory by answering three basic questions:

1. How do you get paid for your knowledge? Is it directly through a knowledge product or service, or indirectly through a physical product?
2. What are the key competencies, processes and relationships that support your ability to get paid?
3. What is your business recipe, that is, how do the competencies, processes and relationships work together as a system to help you get paid?

These sound like abstract concepts. But they are very real. And it was amazing what happened when we showed the management team described in the opener a one-page summary of this kind of inventory using headings like those seen in Figure 1. They saw that their human capital was strong but out-numbered. Their relationship capital was very strong due to the several thousand key program relationships they had nurtured over the course of a couple decades. The best way to grow in this scenario was, indeed, to add headcount. But they had forgotten their structural capital. A review of this category made it clear that the basic tools their people had in the field (a customer relationship management system, marketing materials and periodic training) were good but left lots of room for improvement. And the advantage of an improvement in structural capital is that it has the potential to increase the effectiveness of everyone on the ground at once—a pretty easy ROI story. The general manager saw this picture and immediately asked for a gap analysis to optimize the way their organization did its work.

Optimizing the Black Box: The New Management

The knowledge factory works very differently than did a physical factory in the industrial era. The main driver of the difference is, well, knowledge. In a physical factory, knowledge is concentrated at the top. In general, the bosses of a physical factory could tell the workers how to do their work. This basic fact drove the creation of organization charts as a tool of a command-and-control power structure.

One of the critical characteristics of this new kind of factory is that knowledge is distributed throughout the organization. And work does not get done inside the “silos” of the typical organization chart. This has a number of implications. The manager’s job in a knowledge factory is generally not to tell others what to do. Rather, it is to ensure that the team has the resources it needs and to facilitate knowledge flows, learning and collaboration. The job requires striking the right balance between knowledge flows from the top down and the bottom up.



The easiest way to make this concept real is to draw a map of your organization (or individual parts of it) as a network. We like to use the value network approach as defined by Verna Allee which visualizes work as:

1. Nodes of a network to depict the roles that are critical to getting work done
2. Solid lines between nodes to depict tangible exchanges such as contracts, forms and money
3. Dotted lines to depict intangible exchanges such as sharing knowledge, making an introduction or providing personal support.

That's what our medical product company did with their operation. They created maps based on the technique illustrated in Figure 2. They mapped all the roles and exchanges for the four core kinds of work they did in the field: program development, healthcare organization relationship development, referral source marketing and closing sales. To optimize them, they looked at both tangible and intangible exchanges. Where did they have (or should have) systems, materials or training to make the work easier? By creating the maps together with their partners in groups like IT and marketing, they made everyone part of the solution. The project is fueling all kinds of innovation that will drive the bottom line.

Measuring the Black Box: The New Accounting

Indeed, all this talk about knowledge does not mean that business has turned into an academic exercise. Quite the contrary. The inner workings of the knowledge factory are designed to create value for a customer—and get paid for it. The monetary stakes in today's economy are high. Putting knowledge to work effectively can create incredible wealth.

But, as explained in the introduction, the intangible capitalist is hampered by lack of good information. This is due to the fact that the accounting and information systems we use today are built on customs going back hundreds of years that were designed for tangibles-based businesses. For a lot of good reasons, changes will come slowly in accounting standards. But this should not prevent managers and strategists from gathering information about intangibles right now. There are three kinds of information that are readily accessible today to any manager and can be used to triangulate the performance and potential of intangible capital:

1. I-Capital Expenditure: Although most of the investment in knowledge intangibles must be booked as an expense under current accounting conventions, accountants can create a management report that tracks all such investments year by year in each of the intangibles categories. Eligible expenses include creation and building of processes (both IT and implementation), long-term investments in branding and partner development, as well as training.
2. Indicators: A second form of measurement available to management teams is nonfinancial indicators. These are aspects of the knowledge factory that can be counted and measured. Many companies have already embraced this concept and track key performance indicators (KPI's). Examples include process metrics and demographic data of human and relationship capital such as headcount and customer number and size.



3. **Assessment:** Many aspects of the performance of the knowledge factory cannot be counted or measured directly. For this reason, an additional type of information is needed. Assessments use a standard tool to tap into the wisdom of stakeholders to analyze the effectiveness, outlook and risk of the various components of the knowledge factory. Assessments ask questions for each key intangible such as “Is it adequate to support our business recipe?” “Is it adequate for our future needs?” “Where are the risks in this intangible?”

Our medical products team is starting with assessment and indicators. They are using the maps of their work processes to identify the places in the system that can and should be measured. These new measurements show how the system is working and, where possible, have an early warning of potential problems. Over time, they will probably get their accountants into the act too and integrate financial data into the same reports. It can be dangerous to use just one of these kinds of measurement in isolation because each provides different but important information. To truly understand the earnings performance of the knowledge factory, it makes sense to triangulate its potential using these three kinds of measurement in combination. The graphic in Figure 3 illustrates this concept of triangulation.

Out of the Black Box Thinking: The New Strategy

The lessons of the new factory, management and accounting are all relevant to the corporate strategist. Understanding these new fundamentals of business is a prerequisite for the development of sound strategy. However, the shift to the knowledge economy also has implications for the strategy process itself.

Just as with any manager in the knowledge era, the job of the strategist is to strike the right balance between the top down and the bottom up. Another way of describing this is as a balance between deliberate and emergent strategy, as defined by Henry Mintzberg:

- Deliberate strategy is developed in a well-understood environment and identifies a clear path. These strategies are usually communicated and controlled from the top of the organization.
- Emergent strategy comes out of learning at a grass-roots level. The environment and the possibilities are not necessarily known but are, rather, discovered. These strategies usually bubble up from the bottom (or even from the outside to the inside of an organization)

Of course, emergent strategy is another way of describing innovation. Seen in this way, innovation can be understood not as a business fad but as an imperative of the knowledge era. To compete and grow in today’s economy, a company needs to encourage and facilitate the application of knowledge to new challenges and the creation of new opportunities. The knowledge needed to do this lies throughout the internal and external networks of the organization. The answers will not come exclusively from the top.

That’s why the intangible capital approach has been so successful for this team. The organizational optimization program has been run as a collaborative project. The people most



interested in the optimization are the people designing the changes. Innovation is ultimately an exercise in leveraging knowledge and putting it to work in new and useful ways.

Conclusion

The next time you head into a board room to answer the challenges facing your company, arm yourself with the tools of the 21st century strategist. Be prepared to shine the light inside the black box and let loose the potential for innovation and growth hidden inside your intangible capital.

About the Author

Mary Adams is an Intangible Capitalist. She is a co-founder of [I-Capital Advisors](#) and [Trek Consulting](#). She is one of the leading U.S. experts on intangible capital and is the author of the *Smarter Companies Blog* and the creator of the [IC Knowledge Center](#), an on-line community with open resources and discussions about intangible capital. Prior to starting her consulting business, she had a fifteen-year career as a high-risk lender at Citicorp and Sanwa Business Credit.

Mary is the co-author of [*Intangible Capital: Putting Knowledge to Work in the 21st Century Organization*](#), in markets from Praeger/Greenwood Press in May, 2010.

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