Information, technology & competitiveness

Francis McInerney, Sean White

Francis McInerney and partner Sean White founded North River Ventures in 1990 with a simple mission: To build the shareholder value of their clients. A New York-based investment firm and venture consultancy specializing in telecommunications, NRV advises carriers, manufacturers and telecom investors the world over on the best way to grow and prosper in telecom during this period of extreme turbulence. With Bell Canada, Matsushita Electric, The Centennial Funds, and Vanguard Venture Partners, NRV has formed CenCom V, an electronics communications incubator located in Palo Alto, California.

Information has been readily available since the invention of the printing press, but never before has its cost been so low, its range so boundless, and its effect so immediate. Today, the Internet -- the application of computer technology to communications - is the driving force in the new economy and causing the cost of information to go into free fall. What this is doing is challenging companies that historically have been pillars of industry to recognize that the old ways of doing business don't cut it in the new economy.

The concept is detailed in the book "Future Wealth," coauthored by Francis McInerney and Sean White. McInerney's address to the Global Executive Forum highlighted the research the authors have done based on companies such as Wal-Mart, Cisco Systems, Dell, and Charles Schwab, companies that are not strictly in the information business.

Looking back over the past 50 years, McInerney and White were able to identify cohesive business patterns and project these patterns into the future. The purpose is to help design companies that can avoid the problems other companies have faced in similar periods of turbulence. Among their conclusions: "Those who know how to capitalize on the falling cost of information have grown and prospered. Those who do not have fallen deep into the Black Hole in Cyberspace, never to reappear."

McInerney asked, "Whatever happened to RCA Computer? Companies like that disappeared overnight."

Internet Power

When McInerney talks about the Internet, he is not talking about dot-coms. He is talking about the Internet as "a tool for harnessing customers and becoming more competitive and more profitable.

Back in the 60s, when mainframe computers ruled, there were only so many thousands of customers for machines of this power and a limit to the amount of pressure they could put on producers. In the 70s that number increased with minicomputers to so many hundreds of thousands. Personal computers allowed tens of millions of customers access to powerful computing in the 80s. And in the 90s, the Internet allowed hundreds of millions of consumers the world over to place huge amounts of pressure directly on producers. With the explosion of postPC and PostTV wireless devices coming to market, customers will be able to demand services not just at their desk, but on every street corner. The number of such devices can be measured in the billions."

All this translates to "customer power," said McInerney. Cheap information gives customers more options in how, when, where and with whom they make their purchases. It puts customers in charge of the sale, causing companies to become more creative in how they compete for that business.
Information, technology & competitiveness

Francis McInerney, Sean White

How it works

Said McInerney: "Every time information becomes less expensive, more of it is substituted for other inputs like labor, capital and natural resources, making goods and services of all kinds cheaper than they were. Cheaper goods leave consumers with more money to spend on other things. If consumer surpluses are large enough, they generate rapid increases in industrial development and wealth."

Furthermore, as McInerney and his partner write in "Future Wealth": Our ability to substitute information at will for every other resource, including labor and capital, is altering the economy in a fundamental way. The falling cost of information improves productivity, keeps inflation low and drives sales.

"Some of the things we do now in a minute or two, like create color slides representing new business ideas, 20 years ago would have taken weeks and uncountable numbers of layout artists, editors, photographers and photo processors. Cheap software has made the whole issue go away."

The Napster effect

Consumer behavior changes when the cost of information falls. McInerney cites Napster as an example. Napster, he explained is an Internet database that allows users to list all the recordings on their computer hard drives, and then swap those recordings among themselves. "Napster is the single most important development in industrial history since the printing press, for one reason. It kicked off a reformation of consumer behavior much the same as the printing press kicked off the Reformation in Europe centuries ago.

What happened to the record industry as a result of Napster? "It got sucked into the black hole in cyberspace virtually overnight because a 19-year-old kid invented a fairly simple piece of software."

"The key point with Napster is that it turns the home into a transmitting station. It turns the whole world into a set of radio stations." Taking the software to the next level, and with a little more bandwidth coming into the homes, it's not too hard to imagine how radio stations can be turned into television stations.

"The kids have, in effect, brought a new form of behavior to the market even before they have the technology to benefit from it."

This is highly unusual, said McInerney, pointing out that "the falling cost of information drives not only new forms of human behavior, but it has the potential to do things that we have never before seen. We have never in history seen a behavior pattern that existed before the technology was fully able to use it.

Entrepreneurs are challenged to figure out how to harness those new forms of behavior. "It's also critical for us to understand that every major industrial power on the planet wants to do the same thing."

Competitive advantages

The falling cost of information has created a power shift to consumers. At the same time, "each drop in information costs unleashes a new market in an order of magnitude larger than itself, thus creating tremendous opportunities for businesses of all sizes. But to become more competitive, companies have to learn how to use the Internet to transform them into soccer ball shaped organizations (see sidebar below) that can sustain powerful interactive brands and strong customer service relationships."
Information, technology & competitiveness

Francis McInerney, Sean White

McInerney defines brand as "the ability to manage how your customers experience your products." Manage is the key word, and it's the opposite of what happens in a car dealership. For example, buying a car means scouting the lots, choosing the model, pulling together the financing and insurance, and handling a myriad of details associated with the sale. "Most of us have spent most of our car ownership lives in car ownership misery, going from brand to brand looking for happiness. For the bulk of the population, there is no brand in the car business because nobody is managing the car ownership experience," said McInerney.

But suppose a car company were structured like a soccer ball? "You could pre-structure the business from one end to the other and exert immense power over your market by using the Internet." Soccer ball shaped companies, such as Dell and the three other companies mentioned at the beginning of this article, are positioned to dominate the marketplace because they know how to use the Internet to reinforce both their brand identification and customer relationships.

At Dell there is almost no infrastructure; of the 39 or so factories that produce its products, the computer company owns only two. Customers order direct, according to their needs and specifications. The order is processed via the Internet and sent to the appropriate factories. When assembled, it is shipped to the customer.

McInerney stressed the importance of brand. "The only thing worth building is brand; in terms of allocating expenses it comes first." If you understand that, everything follows in the right order. If you believe that you start off with a product or a technology or a service, and then go forward into the brand, you will waste staggering amounts of capital because you're going backwards into the brand. If you start with the brand first, I believe that you will always have the most efficient use of your resources."

Soccer Ball Structure for the New Economy

The modern corporation looks like a soccer ball: hollow on the inside, with almost no infrastructure; it is a virtual organization built to keep the pressure on the outside. Replacing outmoded infrastructure are Internet-based tools that do the work once assigned to cadres of paper shufflers. Information on customers or on any of the company's internal functions can be commandeered at super speeds.

In a soccer ball, "those little hexagons of leather are sewn together by an Internet," said McInerney. "They are rigid, but they are highly flexible and responsive to customer needs." Cisco, Dell, Schwab, and Wal-Mart are examples of companies with a soccer ball structure. They have achieved brand superiority in their respective businesses and, for the most part, high growth and high margins.

In contrast, the old "lead ball structure" is held together by a hierarchy; it is inflexible, dense, and marginally responsive to customer input. Telcos, banks and auto makers are examples of a lead ball structure.

Nuggets...

- Information costs are falling in accordance with Moore's Law. This is a formula developed several decades ago by Intel cofounder Gordon Moore, who predicted that computer power would double every 18 months.
To create wealth, organizations must substitute information for other resources - labor and capital - faster than the rate at which the cost of information falls.

We're looking at companies today that are able to use the Internet to redefine how they manage the customer's experience into products, and manage it on a daily basis. That's the kind of thing that is changing the face of American industry.

McInerney and White believe that the telecommunications industry is streaming into a Black Hole in Cyberspace, a point on the Moore Curve where the price implosion is powerful enough to swallow high-cost carriers whole.

The cost of information is always falling. Those ahead of the curve harvest the consumer surpluses that result. Those that try to go back in time, whether they are countries, companies or people, to a past point on the information-cost curve, are certain to fail.

By allowing consumers to talk back, the Internet is altering the relationship between customers and vendors, and turning brand into a moving target. This changes the nature of brand entirely; today it is a process, often delivered remotely in your home or office, rather than at a particular site.

Companies that have understood how to use the Internet to create very deep service relationships with their customers are the only ones that are able to resist the compressing forces of the market.

The entire information business globally will be dominated by the slamming together of television and the Internet and the resulting explosion of bandwidth generated by billions of post-PC devices. The authors believe that few if any networks are capable of handling this explosion, even though it is well under way.

---

**Matsushita's guiding principle**

McInerney and White are inspired by the late Japanese industrialist Konosuke Matsushita, founder of the Panasonic brand. Matsushita's operating principle was: our customer is God. He exploited to the limit the marketing channels available to him at the time. More than once, Matsushita stripped entire layers of distribution out of his business when he found that fewer middlemen made his company more responsive to customer needs and more profitable to boot.

--*Future Wealth*