



# Irving Wladawsky-Berger

*Technical Strategy and Innovation Expert*

TOPIC: Technology/Media

SUBTOPICS: Innovation

## BIG IDEAS:

### Innovation in the Knowledge Economy

We are in the early stages of a profound technology-based revolution with the potential to alter the shape of companies, industries and whole economies, and which could have the kind of impact on us in the 21st century that the Industrial Revolution had on previous generations. Information technologies are the engine driving this revolution, playing the role that "steam power" played in the industrial economy. IT, especially since the advent of the Internet in the mid 1990s, is in the process of transforming just about all aspects of business, society and our personal lives, giving rise to a series of major disruptive innovations and ushering a new, knowledge-based economy.

A few key attributes characterize the market environment in the knowledge economy: it is much more global, integrated and competitive; it is market-facing, people-oriented and service-intensive; and it is highly complex, fast changing and unpredictable. Consequently, the nature of innovation in the knowledge economy is quite different from the past: it is global, open, multi-disciplinary and above all, collaborative.

In this presentation, Irving will discuss the variety of angles innovation can be approached in the new knowledge economy. Some general in nature, that is, what are the major forces driving the changes? He will also speak to industry specific examples where he will uncover key transformations taking place in a specific industries, such as media, healthcare or consumer electronics. And some will be company specific—what does a company need to do to adapt to the changing marketplace and transform its culture?

## BIOGRAPHY

For over 30 years Dr. Irving Wladawsky-Berger influenced and shaped IBM's innovation and technical strategy. During his tenure he was responsible for identifying emerging technologies and marketplace developments critical to the future of the IT industry, and organizing appropriate activities in and outside of IBM in order to capitalize on them. He led a number of successful companywide initiatives including the Internet and e-business, supercomputing, Linux, Grid computing and, in October 2002, IBM's On Demand Business initiative. Retired in 2007, Irving continues to consult for IBM on major new market strategies like Cloud Computing and Smart Planet.

A widely sought after expert in the fields of innovation, technology and transformation, Irving was appointed Strategic Advisor in March 2008 at Citigroup to assist with innovation and technology initiatives across the company. He is helping to formulate Citigroup initiatives related the future of global banking, including mobile banking, Internet-based financial services, and financial systems modeling and analysis. He was a member of President Obama's Technology, Innovation and Government Reform transition team. The goal of this initiative was to developed a set of policy proposals to make government more open and transparent, leverage high-technology to grow the economy and create jobs, and use social networking tools to involve citizens in government transformation through their collective energy and expertise.

### Leadership, Management and Business Transformation

Managing an organization is very challenging and becoming more challenging given today's unpredictable, fast changing, intensely competitive market environment. Being a successful manager in such an environment is truly difficult: you have to constantly improve your products and services to keep up with fast changing technologies and markets; you have to work hard to retain existing customers and attract new ones regardless of how ferocious the competition is; and you must achieve good financial results quarter after quarter, lest you disappoint shareholders and financial analysts, who will then start asking for your head.

In highly disruptive times, let alone in a time of crisis, being an excellent manager is not enough. The tried-and-true management disciplines are no longer working. Something else, over and above excellent management is required, namely leadership. Leaders must be good managers, but in addition, they have to understand that innovation is a key business imperative, especially in these times of change, in order to help a company embrace new disruptive technologies, adapt to a changing market environment, and help transform its business models and culture as required in order to survive the changes and emerge as leaders in the new environment.

As is happening to an increasing number of companies today, businesses that are not able to innovate and transform themselves risk their very survival. In this presentation Irving will analyze the cases of companies that have gone through near death experiences to understand why some, like IBM, make it through, while so many others have not been able to do so.

Irving is Visiting Lecturer at MIT's Sloan School of Management and Engineering Systems Division, Adjunct Professor in the Innovation and Entrepreneurship Group at the Imperial College Business School, and Senior Fellow at the Levin Institute of the State University of New York. In addition, he is a member of several boards including the InnoCentive Advisory Board, the Spencer Trask Collaborative Innovations Board, the Board of Directors of the Federation of American Scientists, and the Visiting Committee for the Physical Sciences Division at the University of Chicago.

He was co-chair of the President Bill Clinton's Information Technology Advisory Committee, as well as a founding member of the Computer Sciences and Telecommunications Board of the National Research Council. He is a former member of the University of Chicago Board of Governors for Argonne National Laboratories, of the Board of Overseers for Fermilab and of BP's Technology Advisory Council. He is a Fellow of the American Academy of Arts and Sciences. A native of Cuba, he was named the 2001 Hispanic Engineer of the Year.

Dr. Wladawsky-Berger received an M.S. and a Ph. D. in physics from the University of Chicago.