Leadership in an Age of Uncertainty

Deborah Ancona, Seley Distinguished Professor in Management, Sloan School of Management

The question, “What is leadership?” has permeated society from our earliest times. The Romans wondered whether force or inspiration was more effective as a motivator. Our own culture glorifies the charismatic while preaching participation. Interest in this question has only intensified as we watch a new world order unfold in the aftermath of September 11th, and as we are bombarded with images of corporate corruption and attempts at reform. We all hunger to know what leadership is yet the concept remains amorphous.

The history of leadership theory started with an emphasis on traits—the notion that it is the make up of the leader that makes all the difference. This approach dominated research up to the late 1940’s. Current research suggests that our admired leaders today are honest, inspiring, self-confident, and adaptive. But traits do not always predict leadership effectiveness and thus researchers shifted to look at the behavior or style of the leader.

This research brief seeks to communicate a framework that allows us to integrate prior leadership theories, while focusing on what leaders actually do. It is a framework that views leadership not as a person, but as a capacity that individuals and groups possess. The framework—developed by four MIT Sloan faculty members, Deborah Ancona, Wanda Orlikowski, Peter Senge and Tom Malone—carries several core assumptions:

1) **Leadership is distributed.** That is, leadership is not solely the purview of the CEO, but can and should permeate all levels of the firm (Senge, 1996)\(^1\).

2) **Leadership is personal and developmental.** There is no one way to lead. The best way to create change is to work with the particular capabilities that you have, while constantly working to improve and expand those capabilities.

3) **Leadership is a process to create change.** Leadership is about making things happen, contingent on a context. Leaders may create change by playing a central role in the actual change process, or by creating an environment in which others are empowered to act.

4) **Leadership develops over time.** It is through practice, reflection, following role models, feedback, and theory that we learn leadership.

---

The framework begins with four key leadership capabilities: Sensemaking, Relating, Visioning, and Inventing. Added to these capabilities is the notion of a change “signature” — your own unique way of making change happen. Leaders in business settings need all of these capabilities to be successful, and cycle through them on an ongoing basis.

**Sensemaking** (term coined by Karl Weick, 1995)\(^2\): Making sense of the world around us. The act of

---


sensemaking is discovering the new terrain as you are inventing it. In the very process of mapping the new terrain, you are creating it.

Building on the work of Sutcliffe and Weick, 2002, some tips for Sensemaking include: seek many types and sources of data; involve others in your sensemaking; do not simply apply your existing frameworks and overlay them on the situation; move beyond stereotypes; learn from small experiments; and use images, metaphors, or stories to try to capture and communicate critical elements of your map.

**Relating:** Development of key relationships within and across organizations. Leadership is not an individual sport and in our networked age the ability to connect and build trusting relationships is a key competency. While leaders try to create trust, optimism, and harmony they often get anger, cynicism, and conflict. The core capability of relating centers on the leader’s ability to engage in inquiry, advocacy, and connecting. Inquiry and Advocacy are terms coined in the pioneering work of Chris Argyris and Don Schon (1996), as well Peter Senge (1990). In order to enable effective interpersonal relationships both practices are necessary. Inquiry means the ability to listen and understand what others are thinking and feeling. It also involves trying to understand how the other person has moved from data to interpretation to assessment rather than simply reacting to the assessment itself. It requires the leader to suspend judgment and to listen without imposing his/her personal point of view. And yet leadership requires having opinions and taking a stand.

The second area of relating is advocacy. This involves taking a stand and trying to influence others of its merits while also being open to alternative views (Pfeffer, 1992). It means taking responsibility for your own biases and leaps to judgment and being able to say, “I was wrong, I jumped to conclusions based on insufficient data and overreacted.” Yet often in business there is a great deal more advocacy than inquiry. Often we are so busy trying to push our own ideas that we do not really listen to what others are saying.

The third area of relating is connecting. It is the ability to build collaborative relationships with others and to create coalitions for change. Tips for effective Relating are: understand the perspective of others within the organization and withhold judgment while listening to others; encourage others to voice their opinions; be clear about what your stand is and how you got there; think about how others might react to your idea and how you might best explain it to them; and think about your connections.

**Visioning:** Creating a compelling vision of the future. While sensemaking creates a map of what is, visioning is a map of what could be. Visions are important because they provide the motivation for people to give up their current views and ways of working to change. Perhaps most importantly, visions provide people with a sense of meaning about their work. It answers the question “why am I doing this?” Thus good leaders are able to frame visions in a way that emphasizes their importance along some important value dimensions. Tips for effective Visioning are: develop a vision about something that excites you or that you think is important; frame the vision with an ideological goal; use stories, metaphors and analogies to paint a vivid picture of what the vision will accomplish; practice creating a vision in many arenas; enable those around you by pointing out that they have all the skills and capabilities needed to realize the vision; and embody the key values and ideas contained in the vision - “walk the talk.”

**Inventing:** Creating new ways of working together. It entails creating the processes and structures needed to make the vision a reality. Inventing involves implementing the steps needed to achieve our vision of the future. Tips for effective Inventing include: maintain focus on improving the ways that people are working together in your team and organization; when a new task or change effort emerges, think through how it will get done - who will do what, by when, and in what configuration; play with new and different ways of organizing work - examine alternative ways of grouping people together, organizing their internal interaction, and linking across different groups; and blend sensemaking and inventing.

---

The Four Capabilities: These four capabilities, sensemaking, relating, visioning and inventing are complementary. Without inventing, visions may just be dreams that never get realized. Inventing without a clear sense of the current situation and where you want to go can result in frenzied chaos. People want to know that they are operating with an accurate map of reality, not an outdated one and not one based on wishful thinking. They also want to know that they are working for something that is important. Finally while visions and new structures can result in lots of activity, in the absence of a base of people who are committed to working together to accomplish the work any success may be short-lived.

These capabilities can also create tensions that need to be managed. It is difficult to hold an image of the future and the present simultaneously. Balancing people and processes, action and understanding, individual and collective aspirations, can be challenging. Yet it is inherent in the framework that managing these very tensions is the essence of leadership.

While individuals need to exercise all four capabilities, they must also work with others who complement their skill portfolio. In this way leadership can be shared among multiple individuals. One might plan the future while another works with others to invent ways to improve current operations. Thus, leadership is both an individual and a collective capacity.

The Change Signature

The four capabilities, like the compass that they form, are only a tool. The change signature determines what the tool is used to do, and how it is used. While the capabilities focus on what leaders do, the change signature is about who the leader is. It develops slowly over time based on experience and skills. But it is a key part of the leadership model because it represents who we are as leaders.

Each person’s change signature, like her fingerprint, is unique. Each person brings his/her own unique values, skills, experiences, tactics, and personality to the leader role. Each person has his/her own personal way of making change happen, although there certainly are patterns across individuals. The change signature is made up of a credo and the characteristic way in which the leader creates change. The term credo refers to a person’s core values and beliefs for themselves and for the organization that they are leading (this concept is built on that of Kouzes and Posner, 1993)\(^7\).

The second aspect of the change signature is the way that you typically embody the four capabilities and the characteristic way in which you make change happen. What skills and abilities, tactics and modes of operating characterize how you carry out your leadership activities? For example, some people carry out sensemaking in a very interpersonal manner, moving from office to office learning from everyone they meet. For others it is a very analytic process that starts and ends on the computer. Leaders learn through experiences what is most important to them and how they can be most effective with others. This process is facilitated when leaders take the time to reflect on their experiences. Often people report that they learn more from failures than successes, but all experiences can help shed light on what kind of leader you are.

Leadership, as presented here, is a combination of four capabilities, and a change signature. It is distributed across individuals, and involves sensemaking, relating, visioning and inventing. By engaging in these activities over time leaders begin to develop their own distinct way of making things happen. We call this characteristic way of leading the change signature. Through a variety of experiences leaders can further develop their capabilities, build leadership capacity in an organization, and create a better understanding of their own values and skills.

MIT Leadership Center: The MIT Leadership Center is dedicated to developing leaders who can improve their organizations and the world through rigorous research, education, global dialogue and action. The centers distinct approach closely aligns leadership and team development with science, engineering and management skills leveraging the best of MIT to enable individuals and organizations to lead more effectively in a technology-driven world. By combining theory and practice, students and executives gain hands-on training while addressing and solving practical problems affecting organizations and society. For more information, please contact Mary Schaefer, Executive Director, at (617) 258-7216 or visit http://sloanleadership.mit.edu

ABOUT THE MIT CENTER FOR EBUSINESS

Founded in 1999, the Center for eBusiness is the largest research center in the history of the Sloan School. We are supported entirely by corporate sponsors whom we work with closely in directed research projects. The Center has funded more than 45 Faculty and performed more than 60 research projects. Our mission is to join leading companies, leading educators, and some of the best students in the world together in inventing and understanding the business value made possible by digital technologies. Our interactions are a dynamic interchange of ideas, analysis, and reflection intended to solve real problems.

Examples of Current Focused Research Projects:
- Implications of e-Commerce for New Services and Structure of Logistics Systems
- How Do Intangible Assets Affect the Productivity of Computerization Efforts?
- Wireless and Mobile Commerce Opportunities for Payments Services
- Benchmarking Digital Organizations
- The Impact of the Internet on the Future of the Financial Services Industry
- Pricing Products and Services in the High-Tech Industry

The Center for eBusiness has recently entered into Phase II, focusing more explicitly on business value, while at the same time including technologies beyond the Internet (e.g. RFID) in its purview. Our goal, in part, is to reduce that timeline through basic and applied research, engagement with industry sponsors, and the sharing of best practice, and the MIT’s credo of combining rigor with relevance is well served.

We are organized into five areas of expertise – or Special Interest Groups:

- Productivity
- Customer Advocacy
- Communications
- Global Financial Services
- Products and Services

Founding Sponsors
- BT
- General Motors
- Intel
- MasterCard International

Research Sponsors
- CSK Corporation
- France Telecom
- Nortel Networks
- Qwest Communications
- Suruga Bank
- University of Lecce
- UPS

Member Sponsors
- Amazon
- Bank of Tokyo-Mitsubishi
- Cisco
- GEA Consulting
- PricewaterhouseCoopers
- Publicis Technology
- SAP
- SAS

CONTACT INFORMATION

MIT Center for eBusiness
MIT Sloan School of Management
3 Cambridge Center, NE20-336
Cambridge, MA 02142
Telephone: (617) 253-7054
Facsimile: (617) 452-3231
http://ebusiness.mit.edu/

David Verrill, Executive Director
Erik Brynjolfsson, Director
Glen L. Urban, Chairman
Steve Buckley, Associate Director
Meredith Sampson, Financial Assistant
Carlene Doucette, Executive Assistant