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SEI Distinguished Lecture

Dr. Peter Drucker

on

"The New Organization"

SEI Center for Advanced Studies in Management

The Wharton School

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MISSION STATEMENT

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*The SEI Distinguished Lecture Series recognizes the contributions of some of the world's leaders of management theory and practice and provides a forum for sharing their insights on the challenges and opportunities facing business in the next century.*

## Introduction

The SEI Distinguished Lecture Series has drawn the finest wisdom from all parts of the globe. We have turned to Japan for the global vision of Kenichi Ohmae, director of McKinsey & Company (Japan), and to Europe for the organizational insights of Percy Barnevik, president and CEO of ABB Asea Brown Boveri Ltd. In this third lecture, we look to the United States -- to an individual who is known, for good reason, as "a national treasure."

Born at the dawn of this century, Dr. Peter Drucker is one of the most insightful and enduring management thinkers and writers of this generation. In a formal lecture and remarks at a dinner in his honor at Wharton, he looked forward to the challenges facing business and society as we approach the next century.

Because of his long and productive history of association with Wharton, Dr. Drucker was also on campus to comment on Wharton's new MBA curriculum. This curriculum is based on the understanding of emerging management challenges that was developed by the SEI Center. We are pleased to report that Dr. Drucker was enthusiastic about the direction and progress of Wharton's reforms.

As always, Dr. Drucker's views are challenging and provocative. His vision of the current and future challenges facing business have significant implications for faculty,

students, and executives.

It is our pleasure to share the wisdom and wit of one of the true giants of business thought in our age.

Sincerely,

**Alfred P. West, Jr.**

Chairman and Chief Executive Officer

SEI Corporation

Chairman, SEI Center for Advanced Studies in Management

**Jerry Wind**

Lauder Professor; Professor of Marketing

Director, SEI Center for Advanced Studies in Management

Dr. Peter Drucker

Despite a non-stop schedule of meetings and talks, Dr. Peter Drucker displayed no shortage of the straightforward insights, humor, and stamina that have made him one of the most profound and prolific contributors to modern management theory.

At 83, he is the "youngest of the three" U.S. management experts who went to Japan in the 1950s (the others are W. Edwards Deming and Joseph Juran). "You reach a point when nobody under the age of 80 is able to be trusted with a major job," Drucker joked during remarks at a dinner in his honor attended by university and corporate leaders. Author of 27 books -- which have been translated into more than 20 languages -- he has weighed in on topics ranging from management to economics to innovation. His eclectic writings also include an autobiography and two novels. His most recent book, *Post Capitalist Society*, informed much of his discussion during his talks at Wharton. Drucker is a consultant on strategy and policy for organizations ranging from major corporations to non-profits, and he is a columnist for *The Wall Street Journal*.

Born in Vienna and educated in England, Drucker earned a doctorate in public and international law while working as a newspaper reporter in Frankfurt, Germany. He then worked as an economist for an international bank in London before coming to the United States in 1937. He has had a distinguished career as a teacher at Bennington College, New York University, and

Claremont Graduate School in California, where he is Clarke  
Professor of Social Science and Management.

## THE NEW ORGANIZATION

In his dinner talk and lecture, Drucker outlined a fundamental shift in knowledge and its implications for business and society.

### Centuries Compressed Into Decades

In 1506, the nephew of Leonardo da Vinci asked him what the world was like when he was young. Da Vinci replied that no one who wasn't born in that time could possibly imagine what the world was like. We are currently again in such an age, Drucker said.

"I would say we are about halfway through one of the great transformations of the world -- a transformation in which centuries are compressed into decades," Drucker said. "In 2010 or 2020, it may be very hard for anyone to imagine what the world was like in 1970 or 1980. It is changing so fast. But the speed of change is not the only issue. There were past periods in which change occurred just as quickly. It is the *character* of change that is different."

We are experiencing profound changes in society, politics, and knowledge, Drucker said. "We know about the changes in society," he said. "The political situation is moving in three different directions. It is moving globally, while at the same time moving toward regionalism and tribalism. The most likely

forecast is that we'll fracture into small tribal units. We're facing new challenges there."

Perhaps the most significant and least understood aspect of change has been in the application of knowledge. In the centuries after the development of the printing press, societies flourished only if they accepted the printed book as a vehicle for knowledge. Modern societies face a similar challenge in the adoption of information networks.

"In 1455 came the printed book, in 1650 was the start of the modern school," Drucker said. "It was 200 years before the school was organized around the book. Those civilizations that didn't do this went into decline. In Islamic countries, they rejected books. In China, they rejected them. These had been the leading civilizations of the pre-modern period, but they began to decline."

Today, we are again in a critical century after an increase in access to knowledge. "We have to rethink everything," Drucker said. "In society, we are about halfway through this transition. In politics, we are just beginning. In education, we are just realizing that things need to change."

This shift has implications for the business organization of tomorrow, Drucker said. Among the many changes he foresees for business: the rise of knowledge as the key competitive advantage, the increasing prominence of small- and medium-sized firms (and the concurrent decline of the giant corporations), increasing



globalization, and flatter management structures.

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"In 2010 or 2020, it may be very hard for anyone to imagine what the world was like in 1970 or 1980."

### Three Revolutions in Knowledge: Not What Karl Marx Had in Mind

Three revolutions in knowledge have successively transformed the business landscape -- and ultimately played a central role in the fall of Marxism. The revolutions were the application of knowledge to products, to work, and to knowledge itself.

The first upheaval was the Industrial Revolution, when knowledge was applied to products and processes. "Many of these products had been around for a long time, but they were too expensive," Drucker said. "By applying knowledge to the product, the Industrial Revolution made products cheap and more plentiful."

The next knowledge revolution was in the application of knowledge to work -- to increase productivity. Increases in productivity resulted when Frederick Taylor, the father of scientific management, applied knowledge to work in the late 1880s. "He allowed us to make an annual four to five percent compound increase in productivity over 100 years, resulting in a 50-fold increase over a century," Drucker said. "This led to the rise of the middle class, and that was what defeated Marxism."

"In 1900, no educated person anywhere in the world saw anything but the inevitable triumph of socialism," Drucker recalled. "But now the West has defeated it. How? Its basic premise proved invalid. The proletariat didn't become immiserated; it became the middle class. What explains this? Productivity."

The third knowledge revolution began after World War II, as managers began to apply knowledge to knowledge. "The third revolution is still under way," said Drucker. "This is as great a revolution as the two that preceded it. We are recognizing this and restructuring organizations to become knowledge-based. We have realized that most of the management layers don't manage anymore. They are merely relays to carry signals. According to information theory, every relay you add to a system doubles the noise and cuts the information in half."

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### "Knowledge is the New Key Resource"

Our access to and relationship to knowledge have changed dramatically. Drucker recalled that when his 12-year-old

grandson recently was asked to write an essay on France, he merely logged onto a computer network. He sent out a question on the network and received volumes of information in response. "His only problem was he needed only six to eight pages, so he had to condense it," Drucker said.

When 12-year-old students have access to this kind of power, education cannot remain the same and neither can business. Organizations are just beginning to come to terms with the implications of managing knowledge, he said.

"Knowledge is the new key resource, but we don't really know how to manage knowledge," Drucker said. "Universities and hospitals are wrestling with the management of knowledge. Most corporations are not wrestling with it yet."

This failure to manage knowledge is reflected in decisions to outsource work to other countries. "Look at companies that are taking more work offshore to low-wage countries. About seven out of ten have not done well. Even those companies with an extremely high labor content do not do well."

Many organizations also have made the mistake of leaving information management to their systems experts. "When you go into a hardware store, you don't ask, 'Should I upholster that chair?' You ask what hammer to use. Similarly, you should ask the information specialist what information is appropriate to the task, but the task is your decision. You also need to ask what information do you owe, and to whom. Information management is

currently focused on the tool maker, not the tool user. We need to take responsibility for information."

Knowledge can be applied to increasing productivity or to generating new products and services. "Applying knowledge to existing products and services leads to greater productivity. Applying knowledge to new products and services leads to innovation," Drucker said.

"The rise of Japan as an economic power was virtually unprecedented," Drucker said. "Every new economic power before Japan had risen on innovation: The English on steam power, the United States on chemical, electrical products, phones, and automobiles. The Japanese achieved success in established industries by applying knowledge and doing better what competitors only did well."

Now it is no longer enough to be good at innovation or productivity improvement alone. "In the future, the organization will have to learn to work simultaneously on innovation and productivity," Drucker said. "The Japanese are desperately scrambling to learn innovation. So far they have not succeeded too well. But don't underestimate them. Meanwhile, the U.S. is trying to learn productivity through TQM -- and Europe is not doing much of anything in productivity or innovation."

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"You should ask the information specialist what information is

appropriate to the task, but the task is your decision."

### A Symphony Orchestra

Whereas knowledge in organizations used to be transferred, or controlled, by rigid hierarchies, it now flows freely. "If the organization is information focused, information flows to where it is needed. That is the circulatory system of the organization," Drucker said.

The organization of the future may end up looking more like the structure of a symphony orchestra, Drucker said. General Motors once had 29 layers of management. "If you started when you were 25 or 26 and spent about 5 years at each level, you would be 206 years old by the time you reached senior management.

(If you are not chronologically that age, you will be psychologically that age.) A company should have no more than three or four layers so people can be eligible for senior management positions by the time they reach their 40s."

In contrast, a different organizational structure is used to organize the hundreds of musicians needed to play a symphony. "If it were the typical organization, you would have six assistant vice chairman conductors and six assistant vice president conductors. But in a symphony, there is only one conductor and all the players play to him. They all follow the same score. The individuals take responsibility for their own work," he said.

With wider spans of control and greater individual responsibility, "the careers of tomorrow are not going to be management careers," Drucker said. "Now, in Japan, one out of every four employees is a manager. By the end of the century, it will be one out of every 15 employees.

Teamwork is becoming increasingly important, and, in teams, the power goes to the person with the knowledge needed to complete a task. "It may be the very young metallurgist who is fresh out of graduate school," Drucker said.

On the other hand, organizations still need well-defined structures. "There is a lot of talk about the death of the hierarchy. That's nonsense. That is like saying an organism can live without a skeleton. Somebody's got to be there who can make decisions, or you will never get any work done. You will just have a perpetual bull session. You do need a hierarchical skeleton."

Organizations need to become more flexible. "The new organization is not going to be a very permanent structure," Drucker said. "Over the last 100 years, we have created companies designed for permanence. Every 30 years, half the Fortune 500 companies are gone from that list -- so the half-life of companies is 30 years. Most don't become smaller; they just disappear, or merge, or split up. What you see today are the few survivors. They were built for permanence, but it didn't work out."

CALLOUT:

Knowledge is "the circulatory system of the organization."

### The Rise of the Mid-sized Company

The latest knowledge revolution has undermined some of the traditional advantages of large corporations. "Tomorrow's organization is not going to be a big organization," Drucker said. "The age of the dinosaur is over. There is no longer an advantage in bigness. The great advantage today is to have information. The big companies used to be the only ones who could afford this. But that is no longer true."

Medium-sized companies also have an advantage in their flexibility and ability to innovate. "The competitive advantage of tomorrow lies in the application of knowledge," Drucker said.

"Innovation is hard to achieve in large companies, better in medium-sized companies, and hard in small companies because they don't have the resources."

Young managers are increasingly moving to smaller companies early in their careers, Drucker said. Each fall, Drucker conducts an informal survey of Claremont Graduate School alumni who had graduated seven years earlier. Many went to work for large corporation right after graduation, but three out of five then moved to medium-sized or small companies within three years of graduation.

"These days, when there is no employment security at the large corporations, medium-sized companies are even more attractive," he said. Smaller companies also offer managers an opportunity to make a more direct impact on the future of the organization. "When graduates go to a company with about 500 people, they can put to work what they learned in business school. Students tell me they spent year after year at Bank of America, but not once did they get to use what they had learned in business school. At a medium-sized firm, they could use it on their second day.

"Even in Japan, although the able young people are still going to Mitsubishi, they also are beginning to go to small- and medium-sized companies."

CALLOUT:

"The age of the dinosaur is over. There is no longer an advantage in bigness."

### Global Reach

"Tomorrow's enterprise -- large or small -- is going to have to be able to think globally," Drucker said. "But the information we have about the global economy is woefully bad."

Because of their greater focus on specific products or services, small companies may have an advantage over larger ones in the competition for global information.



Drucker described one of his neighbors, who owns a company that produces hospital paging systems, with sales of about \$6 million. His neighbor, who speaks only English, had just returned from a business trip to Japan. "He said there wasn't any language problem. He doesn't speak Japanese. (Between you and me, he doesn't speak much English because he is an engineer.) There was no exchange problem because he billed them in dollars. He says, 'I am not international. I sell to hospitals. I am not in the international economy. I am in the hospital market.' You may not be able to know the international marketplace, but the hospital marketplace you can know."

Drucker described another company that produces water treatment equipment for municipalities. "The CEO says, 'We're not in any place. We sell equipment to municipalities. It makes no difference where they are. Human waste is the same anyplace. That is the secret of concentration. That is the advantage of the medium-sized company.'"

Most companies still don't act globally, but they must think globally. "When I came to this country in 1936, I expected to find a continental economy but was shocked to find there was no such thing. There were three auto companies marketing nationally. Almost all other business was done regionally. That situation changed somewhat in 18 months, partly because the locus of decision making moved to Washington. There was national radio and national advertising. Most business, however, continued to

be local and regional. Even today, very few companies are national, but they have to know what goes on nationally. Now, they need to know what goes on internationally. We need the information base to understand the international economy."

CALLOUT:

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#### Need for a New Curriculum

When a student can push a button and get a term paper on France written in French, the way students are taught has to be reconsidered. When organizations run like symphony orchestras rather than military regiments, the content of management education also must be rethought.

In 1988, Drucker helped kick off the discussions of Wharton's Management 2000 Project -- the precursor of the SEI Center. The Project and Center, through discussions with hundreds of executives, developed a vision of the 21st century organization and the demands on managers in it. This vision became the basis for Wharton's substantial redesign of its MBA curriculum, which will be implemented for all students in the fall of 1994.

As he discussed his views on "the new organization" during the lecture, Drucker also commented on the need for reforms and

praised Wharton's curricular design.

"I was asked to sit in with the curriculum committee on the new MBA curriculum. I was very excited," he said. "I told the committee it was extraordinary, especially in a university, which of all institutions is the most difficult to change.

He also commended Wharton on changing the curriculum while its current program was still strong. "The time to change a curriculum is when you are successful, but no one ever does it. They usually wait until they look like IBM."

Drucker urged students to take a more active approach to managing their careers. "I say to students that the first lesson is: You will have to take responsibility for your career. Take advantage of the fact that when you join a company in America, you don't join a family; you can quit. You have to learn who you are, what your values are, where you belong. The organization should be your tool to perform and achieve."

Just as individuals are taking greater responsibility for their own health care and education, they also need to play an active role in their own career development -- independent of a specific organization. "We are in the process of moving to the individual as decision-maker -- and no place more than in business," Drucker said. "You are going to make your career, not the personnel department of the company in which you work."

CALLOUT:

"The organization should be your tool to perform and achieve."

Q&A: Peter Drucker's View of the World

Drucker fielded questions on a range of topics from executives on the SEI Center board, faculty members, and students in the audience. The questions reflect the extensive range of knowledge, incisive analysis, and delightful wit of Peter Drucker.

Q: If you were the chairman of IBM, what would you do?

A: There are certain jobs I wouldn't take. I think you have to accept the fact that IBM can't be turned around for five or ten years. There is no basic theory of the organization anymore. There is no such thing as a computer company anymore. Industries go through cycles. For a long time they only fought only with defensive actions. I'd tell the new chairman that in three years he will be fired -- and he obviously knows that judging from the contract he negotiated.

Q: In a world without managers, what should we be teaching in business schools, and who should be teaching it?

A: When you are talking about students at business school, undergraduates are very different from MBAs, and they are different from students in advanced executive programs.

The MBA has probably peaked. Executive education is the growth area. Undergraduates are probably the brightest, but they have no experience. We have to teach them "tool knowledge." MBA students have a few years of work experience, so you don't have to tell them the way to the water cooler. But they don't know much more than that. MBAs need broadening. They are usually very one-sided and have very narrow, concrete skills.

Q: What are the prospects for global careers in the future?

A: There is no country yet in which you can make a career in international business. The worst are the Japanese, and it is their greatest weakness. At Claremont, we get about 30 students from Japanese companies each year. These are not the ones who will go into top management. They will be tainted because they studied in the United States. They will be international managers, maybe head of Toyota-USA, but will not go into top management.

The only transnational company that has international people in top management is Coca-Cola. At Ford, which is far ahead of many other companies, there are Americans who have served overseas.

In 1945, General Motors sent an assistant general manager over to rebuild Opel. When he returned, they told him: "Great job," and gave him his old job back as assistant general manager.

Another manager was going to be tapped to save Opel, but got out of it. He ended up leading the Buick division.

Students ask me how to get a job in an international company. I tell them, "If you want to get a job in an international organization, join the Peace Corps." Few managers get promoted into top management because they have served overseas. The principle is "out of sight, out of mind."

At a company such as Merck, for example, with 60 percent of its revenues coming from outside the United States, no one in senior management has served overseas. They know tourist Paris, but that is not enough to make decisions when you control 20 percent of the French pharmaceutical market.

Q: The fastest growing sector is government. Should management education turn out better government leaders?

A: I once tried to combine a school of business with a school of government administration. It was a mistake. My graduates were unemployable. They were too dangerous.

I once told the president that I would abolish economics. Of course, growing young people need more sleep than they get in college, and I think the most positive part of economics is that it may offer them a way to get extra sleep.

No service institution has the foggiest ideas of where its costs are. Hospitals are the worst, and government is hopeless.

Q: Do you advocate separating the CEO and chairman?

A: I've always advocated that.

Q: How can the banking industry be turned around?

A: That is a tough problem. The first textbook on banking was published in 1903. It began with two sentences: "Banks prosper because of the incurable ignorance of the public. Banks make money from the margin between what they get on the money they pay out and what customers don't get on the money they pay in." These margins are gone. Customers switch to the bank with the best rates. Since we can no longer depend on interest differentials, we have to go to fee-based systems. This is what Walter Wriston did at Citibank.

Second, banks are in the process of becoming financial services institutions. The biggest banks are not going to be commercial banks. They are not legally banks at all. GE Finance has up to ten times the actual transactions of the biggest banks of the world.

One tremendous plus for the banking industry is that everyone in the industry knows things are changing and they must change.

Q: With the declining advantage of the large firm, should large corporations be broken into smaller ones?

A: You have to find a way to create management that is accountable and close to the market. A flotilla of small or medium-sized ships is far easier to command than a large aircraft carrier. It is so much faster. It takes four hours for the aircraft carrier to turn around. A light cruiser can turn around in eight minutes. That is a big advantage.

Q: How will information-literate organizations and managers use knowledge?

A: In accounting, for example, we have two information systems. We have an old accounting system that celebrated its 500th anniversary and a new management information system -- side by side. The next generation is going to go by the management information system.

Both systems are headed by people who don't understand information. Wal-Mart understands information. It uses the information in cash registers to go straight back to the factory. It cut out levels between the retailer and manufacturer.

Q: If you graduated from the Wharton MBA program today, what criteria would you use to select your first employer?

A: How much does he pay? He knows nothing about you. You know nothing about him. The second job you will know more about yourself--whether you like to work with people or not, whether



you prefer large or small companies, whether you work best under stress or go to pieces. So, for the first job, go where the money is.

Q: With the fragmentation we have seen in Eastern Europe, do you think small groups can survive in a world dominated by tribalism?

A: Your hypothesis is that larger is better. But when information and money have become truly transnational, there are no economies of scale. The old saying is that "Money knows no fatherland." It never did, and information also knows no fatherland.

Twenty years ago, when I first began to expect the disintegration of the Soviet Union, I sat down with a friend from Estonia. He said the country couldn't economically survive outside the Soviet Union. Now he is the minister of economics in Estonia, and that little country does better than any of the big successors to the Soviet Union.

## Implications

Peter Drucker's view of the emerging "new organization" has significant implications for managers, academics, and students. Among the major implications of his comments at Wharton:

### **For Managers**

- To take advantage of the new power of information technology, organizations will have to change. How can you take advantage of the power of knowledge? How can your organization take advantage of the power of knowledge?
- Companies need to gain information about global markets. How can they overcome the scarcity of global information? Does your organization encourage global experience for its managers?
- Companies need to rethink their need for a large hierarchy in the light of the new "circulatory system" of knowledge. How can your organization be structured to ensure the free flow of knowledge?
- Small and medium-sized companies have gained new advantages. What advantages and disadvantages are a result of your

organization's size?

**For academic leaders:**

- Access to knowledge has implications for the content and delivery of education. The creation of the book led to the creation of the modern school. What form of education will result from the rise of information technology?
- Business curricula should be reconsidered in the light of the challenges managers face in the new organization. What skills and perspectives are crucial for managers to succeed in smaller, less hierarchical organizations?
- Research is needed to create tools for managing knowledge and to develop a deeper understanding of the impact of the application of knowledge to knowledge on organizational structure and function. What are the implications of this third revolution in knowledge?

**For business students:**

- Workers need a different set of skills to succeed in flatter, information-focused organizations. How can you develop the

necessary skills and knowledge?

•Now, more than ever, students need to accept personal responsibility for designing their own career paths. How can you best structure your career in this environment?

•Given the decline of some of the traditional advantages of large organizations, would you be better off working in a small or medium-sized firm?

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