San Francisco, California
March 27-31, 2001

The International Forum

Agenda

# The Internet & the Global Corporation

*Imagination is*
*more important*
*than knowledge.*

ALBERT EINSTEIN

THE INTERNATIONAL FORUM

# THE INTERNET & THE GLOBAL CORPORATION

## SAN FRANCISCO AND THE SILICON VALLEY, CALIFORNIA, USA

## MARCH 27 - 31, 2001

### ACCOMMODATIONS & MEETING FACILITIES

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# THE INTERNATIONAL FORUM

The International Forum is a network of business leaders who come together to be challenged to think differently about globalization and the changes that are affecting their companies and the societies in which they operate. The Forum experiences are specially designed and enable leaders to test themselves and their thinking by bringing them together with their peers from other industries and regions of the world. It emphasizes learning as an essential activity for leaders. It provides opportunities to learn from differences - other perspectives, sharing of ideas and experience - and supports these with an extensive network of resource people in different regions who are scholars, leaders in government, business, society, culture and the arts. Involvement with The International Forum over a period of time provides the context for leaders to continually seek new ideas and solutions in a changing global marketplace.

**Active Learning**

The International Forum engages its participants in active learning as a way to find answers to problems, to develop ideas and opportunities and to formulate strategies for pursuing them. Rather than advocating any particular solution or course of actions, it provides the process for participants to learn what others think and have done, to assess the choices, to form their own questions and to decide on a course which they themselves understand and can execute successfully. This is achieved by emphasizing discovery, experience and encounters. It involves participants meeting people where they live and work - interviewing, listening and understanding - as they develop opportunities and find solutions. Over the past twelve years, programs of The International Forum have been attended by more than 600 of the most senior executives from 250 global companies in Europe, Asia and North America.

The International Forum helps leaders to understand change and learn using an approach that incorporates five important premises:

- *Understand the societies in which you do business.* Business is a part of the society in which it operates. At the Forum, participants learn how to understand the societies in which they do business. They meet and share experiences with the people who live in the region and discover how they are changing.
- *Learn from different perspectives.* Leaders must be exceedingly skilled in recognizing how all types of change will affect them and their company. Through the rich diversity of the other executives participating in the Forum, participants discover how to learn from the differences in the perspectives and experiences of others.
- *Active Learning.* The best way to learn is to actively engage in discovery, encounters, and experience. Throughout the Forum, participants go out in the community to meet people where they live and work, to interview and observe, to ask questions and experience.
- *Go to where the real-life experiences are.* To understand the issues and opportunities of running a business in other parts of the world, it is necessary to be there. The Forum takes participants away from daily routines and regular advisors, to key locations in Europe, North America and East Asia. There, the Forum creates a special environment for participants to consider problems, challenges and the potential for change.
- *Learn from other disciplines.* Understanding problems and dealing with opportunities in business is greatly enriched by the way the Forum brings the perspectives of history, science, technology, society, the arts and culture to bear on the design of its programs.

**THE WHARTON GLOBAL LEADERSHIP SERIES**

**East Asian Forum**
Kyoto, Japan
*May 8-12, 2001*

**North American Forum**
Philadelphia, USA
*September 5-9, 2001*

**East Asian Forum**
Tokyo and Kyoto, Japan
*January 15-19, 2002*

**European Forum**
Stockholm, Sweden
*April 23-27, 2002*

**LEADERSHIP THROUGH MUSIC**
Cracow, Poland
*May 18-19, 2001*

**INTERFORUM MEETING**
Lisbon, Portugal
*May 20-21, 2001*

**UNDERSTANDING CHINA**
**A Special Forum in Shanghai and Zhejiang Province**
Shanghai and Zhejiang Province, China
*October 23-27, 2001*

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# THE INTERNET & THE GLOBAL CORPORATION

**SAN FRANCISCO , USA**

| Tuesday 27th | Wednesday 28th | Thursday 29th | Friday 30th | Saturday 31st |
|---|---|---|---|---|
| **The Fairmont Hotel** | **The Fairmont Hotel** | **Silicon Valley** | **Silicon Valley & San Francisco** | **The Fairmont Hotel** |
| | ❑ EARLY MORNING YOGA 6:45 a.m.<br>*Pavilion Room*<br>*Joshua Feinbloom* | ❑ EARLY MORNING YOGA 6:15 a.m.<br>*Garden Room*<br>*Joshua Feinbloom* | 14. REINVENTING THE COMPANY – PART I 8:00 a.m.<br>*Nancy Doyal, Doug McGowan,*<br>▪ Site Visit – "CoolTown"<br>▪ Reinventing the Company | ❑ EARLY MORNING YOGA 7:00 a.m.<br>*Pavilion Room*<br>*Joshua Feinbloom* |
| | 3. ISSUES FACING THE PARTICIPANTS 8:30 a.m.<br>*Michael Alexander, Nancy Doyal* | ▪ Breakfast 6:00 – 7:15 a.m. | 15. REINVENTING THE COMPANY – PART II 10:00a.m.<br>*Michael Alexander,*<br>*Ann Livermore* | 21. STAKEHOLDERS IN THE NEW ECONOMY 8:30 a.m.<br>*David Heidt, Rocco Rossi,*<br>*David Maher, Donna McDonald* |
| | 4. THE INTERNET ERA: 9:00 a.m.<br>Where we have come from,<br>Where we are going<br>*Michael Alexander, Kenneth DeWoskin,*<br>*Scott Dinsdale, Kenneth Ford,*<br>*James Taylor, YY Wong* | ▪ Departure to Burlingame and Palo Alto 7:30 a.m.<br>10. COMPANIES OF THE SILICON VALLEY | ▪ Departure to San Francisco 10:30 a.m. | 22. THE GOVERNMENT ENTERPRISE OF THE NEW ECONOMY 9:30 a.m.<br>*Nancy Doyal, Julia Johnson,*<br>*Bill Mularie* |
| | 5. REINVENTING BUSINESS 10:15a.m.<br>*Nancy Doyal, Judith Campbell, Scott*<br>*Dinsdale, Vivek Kapur, Alan Snyder* | ▪ Arrive Silicon Valley 8:15 a.m.<br>Crossworlds Software<br>*Alfred Amoroso*<br>Sun Microsystems, Inc.<br>*Larry Weber* | 16. DELANCEY STREET 11:30a.m.<br>*Michael Alexander,*<br>*Mimi Silbert* | 23. SEARCHING FOR STRUCTURE IN THE INTERNET ERA 10:30a.m.<br>Legal, Privacy, Investing, Regulation<br>*Kenneth DeWoskin, Ken Ford,*<br>*Ellen Knapp, Dan Lynch, David Maher* |
| | 6. YOU & YOUR CUSTOMER 11:30a.m.<br>Reinventing Marketing & Distribution<br>*Kenneth DeWoskin, Vivek Kapur,*<br>*Rocco Rossi, Alan Snyder* | ▪ Arrive Palo Alto 10:30 p.m.<br>IDEO<br>*Tim Brown, David Haygood* | | 24. ALTERNATIVE FUTURES 11:30 a.m. |
| | ▪ Lunch 12:30 p.m.<br>*Pavilion Room* | ▪ Boxed Lunch 12:00p.m. | ▪ Lunch 12:30 p.m.<br>*DelanceyStreet* | ▪ Lunch 12:30 p.m.<br>*Pavilion Room* |
| ❑ INFORMATION 3:30-5:00 p.m.<br>Main Lobby | 7. THE ORGANIZATION, VALUES & EXPECTATIONS 1:30 p.m.<br>*Nan Doyal, Timothy Brown,*<br>*Barry O'Connell, Rocco Rossi* | 11. PASSION DRIVEN GROUPS 1:00 p.m.<br>NASA Ames Research Center<br>Site Visits<br>▪ Automony for Space Exploration<br>▪ Neuro Engineering<br>▪ High Performance Computing<br>▪ Future Flight Central | 17. GROUP DISCUSSIONS 1:30 p.m.<br>*Delancey Street* | |
| 1. THE DEATH OF DISTANCE 5:30 p.m.<br>*Michael Alexander, J. S. Holliday*<br>*Pavilion Room* | 8. INVESTING IN THE FUTURE 2:45 p.m.<br>*John Abrahamson,*<br>*Alain Rappaport* | 12. NASA Discussions & Observations 3:30 p.m.<br>*Kenneth Ford, Henry McDonald,*<br>*Peter Norvig, Steven Zornetzer* | ▪ Departure to Z Space Studio 2:30 p.m. | |
| 2. BEER VS. WINE 6:30 p.m.<br>A MARKET ON-LINE<br>*Nancy Doyal, Peter Byck, Rocco Rossi* | 9. MYSTERIES OF THE SILICON VALLEY - Introduction 4:00 p.m.<br>*Michael Alexander, Nancy Doyal,*<br>*Alfred Amoroso, Timothy Brown,*<br>*Kenneth Ford* | 13. MYSTERIES OF THE SILICON VALLEY – PART II 4:30 p.m.<br>Observations & Conclusions<br>*Nancy Doyal, Kenneth Ford* | 18. ASIA'S NEW ECONOMY 3:00 p.m.<br>*Ken DeWoskin, Paul Su, YY Wong,*<br>*Robert Yung* | |
| | | ▪ Departure to Hotel Avante 6:00 p.m. | 19. ALWAYS ON 4:15 p.m.<br>A Market on the Move<br>*John Abrahamson, Gustave Barreda,*<br>*Göran Rassmuson, Robert Yung* | |
| | | | 20. COMMUNICATING WHATWE HAVE LEARNED THROUGH THE ARTS 6:00 p.m.<br>*Diane Durston, David Dower,*<br>*Michael Palladino* | |
| ▪ Dinner 7:30 p.m.<br>*Fairmont Penthouse Suite* | ▪ CONNECTING OFF-LINE 7:00 p.m.<br>*Restaurants of San Francisco* | ▪ IDEA MARKETPLACE DINNER 7:30 p.m.<br>*Mei Long Restaurant* | ▪ Dinner 7:30 p.m.<br>*mc2* | |

# INTRODUCTION TO THE INTERNATIONAL FORUM IN SAN FRANCISCO AND THE SILICON VALLEY

The International Forum in San Francisco and the Silicon Valley is about the strategic implications of the Internet for business and for the societies in which they operate. Participants will examine the concept of their own business and its value proposition in the context of the changes taking place. They will explore ways of redefining their business in which the Internet is "always on" while simultaneously considering the changing role and demands of their stakeholders, the role of governments and non-government organizations as they together define new patterns and roles for players in the Internet Era.

The Forum begins with a historical perspective on technological changes that facilitated the creation of great wealth and new means of creating commerce. Where have we been and where we are going? What are the enablers and constraints on future transition and transformations? Participants meet with leaders of companies who have reinvented businesses because of the Internet and information and learn from their experiences.

Understanding the "ecosystem" in which the Internet itself exists is part of the process of rethinking what the business will be in the future. Seeing how the Internet may affect the company from the outside means understanding how the customers, suppliers, distributors, employees, competitors, partners and communities will be affected by the Internet. What important changes in patterns of behavior are likely to affect the products and services of the business and how it is to be organized in the future?

The Forum travels from San Francisco, with its own history of gold rushes, wealth creation, social activism, creativity and innovation to Silicon Valley where participants visit a wide selection of enterprises that have produced a steady stream of innovations and new ideas. As they encounter different situations and experiences, participants will draw their conclusions on the reasons why the Silicon Valley environment continues to produce new technologies-ownership, venture capital, financial fortune, self-fulfillment, invention, creativity, making a difference-all part of a complex system that produces results.

By special arrangement, the Forum will spend time at the NASA Ames Research Center to understand the distinct relationship that this large and somewhat bureaucratic resource of NASA has with the commercial technologies of Silicon Valley. The creative management style and remarkable achievements of the Ames Research Center provide powerful lessons in leadership and organization.

The Valley is not without its own kind of problems-similar in many respects to those at the time of the California Gold Rush more than a century ago. The quality of life, the value systems, the pace of change and the pressures of watching things go up and down produce a contrast to the remarkable productivity that the people in these creative organizations can achieve.

The Forum takes a global perspective on how the Internet is driving change. The experiences of Asia and Europe are brought to the Forum by those who are actively involved in China and Southeast Asia, Japan and Europe. As a global phenomenon, the Internet affects everyone, but there are important differences in the way companies and industries are using these new technologies and the degree to which customers, producers and societies are adopting it.

# INTRODUCTION TO THE INTERNATIONAL FORUM IN SAN FRANCISCO AND THE SILICON VALLEY

Participants at The International Forum play an active role. During the four days of the Forum they gain insights by working together on implications of the Internet for their businesses. Expert resource people are invited to join the Forum and act as catalysts in the experiences and discussions. As participants further develop their own ideas about the Internet, expert resources are available to be consulted individually or in teams. The Forum moderators coordinate the sessions and the discussions.

During the Forum, participants will stay at The Fairmont Hotel in San Francisco and the Hotel Avante in Mountain View, California. The sessions and activities will take place at The Fairmont Hotel and at various locations and companies in and around San Francisco and the Silicon Valley.

## HYPE AND ANTI-HYPE

The Gartner Group consultants have developed a useful concept to describe the hype around new technologies, which they call the "hype cycle." As a new technology - like the Internet - is triggered, the hype curve soars upward until it reaches a peak of inflated expectations. Then it sinks almost straight down into a trough of disillusionment, as the less successful players drop out. And finally it climbs steadily upward again to a new stable plateau, as clear winners emerge and the new technology is absorbed, integrated and made profitable by people and industries that understand it.

According to the hype curve, where we are now with the Internet is in the trough - when all those who didn't really understand it or who are disillusioned by their dot.com investments pronounce it all a bubble. This trough, though, can be as misleading as the hype cycle's peak. If you think that just because Pets.com didn't make it the Internet is over, then you're not paying attention.

The real Internet wars are just beginning, and they aren't going to be between Amazon.com and E-Toys. The real Internet wars happen when all the old-line companies, with real assets, real size and real business models, fully absorb the Internet - including e-commerce, e-inventory, e-bookkeeping, e-training, e-customer management - into their traditional businesses and start to take each other on with meaner, leaner companies.

The real Internet wars happen when Goliaths like Target, Kmart and Wal-Mart, or G.M., Toyota and Ford, or Dell and Compaq fully absorb the Internet to speed up, lighten up and globalize every aspect of their businesses. And the real Internet wars also happen when the NGO's, human rights groups, conservationists and other activists become fully Internet-enabled and use its power to challenge big companies and to force transparency on big governments.

As Jeffrey Garten writes in his new book, The Mind of the C.E.O., "The big question is whether today's C.E.O.'s have the savvy and the stamina to defeat the dot.coms, which is the first leg of the race, and then run this second, more difficult and much longer race against their peers - or whether it will take their successors to do it."

The measure of what's happening with the Internet today is not Buy.com or the Nasdaq. It's what is happening in China, where Internet deployment is moving so fast that Chinese will be the most popular language on the Web by 2007; in India, where AOL just announced a $100 million investment; and in Europe, where the net economy is expected to grow twentyfold by 2004.

"People talked about the Internet as a business revolution; it actually constitutes more of a business evolution," argues Orit Gadiesh, the chairman of Bain & Co., consultants. "Revolution is when the nature or distribution of power shifts. But what is happening now is that the traditional holders of assets are absorbing the Internet and leveraging it as a tool. The Internet is, though, an instrument of social revolution. It has put power in different people's hands and connected people who have never been connected before."

Because the Internet build-out is proceeding apace, the next generation could trigger a business revolution as well. "Internet Two," about four years away, will combine broadband, wireless and IP V.6 Internet switches, which will enable everything with electricity to have its own Web address that will make it intelligent. So your refrigerator will be able to talk to your grocery store over the Web or your company's cash registers directly to your manufacturer's assembly line. "Internet Two is a smarter Internet that will allow us to have many more devices connected, controlled and be informed about those devices," says Bill Nuti, the president of Cisco Europe.

As this Internet build-out continues, says Joel Cawley, the director of business strategy for IBM, it will enable businesses, individuals and activists to tap into a much broader and powerful base of creativity and innovation, with a much lighter touch. "So," he adds, "smaller and smaller units will become more and more empowered and bigger and bigger units will become more and more decentralized. None of us knows how this will play out, but we do know it will impact the hierarchy of power in, and between, institutions, governments and activists. And the new rules for these interactions are just beginning to be evolved."

"Hype and Anti-Hype", Thomas Friedman, *The New York Times (www.newyorktimes.com),* February 23, 2001.

## THE PARTNER PROGRAM

The Partner Program of The International Forum provides spouses of its participants with a shared meaningful learning opportunity. The Partner Program helps to build an understanding of the issues in a specific region or country, or surrounding a new technology with regard to business, society, politics and the economy, as well as the influences of history, culture and art.

One of the effects of technology and the Internet on business leaders is the stresses that are imposed on them and the need to be "always on" while having to travel extensively or relocate to confront the challenges of new regions and cultures and a constantly changing workplace. Often these opportunities are more effectively managed if their spouse or partner shares in the experience of learning about new situations and understands the implications of the new technologies being utilized today in business and the community.

The Partner Program is an intensive four-day learning experience. As part of a specially designed program, participants are encouraged to attend, as observers, many of the sessions of the Forum. The Partner Program also meets as a group with special guest resources, to examine issues associated with the growing use of the Internet in business and community. How are the Internet and other new technologies influencing change in lifestyle and values, social and family structure, consumer tastes and products, education, the environment, philanthropy and the economy?

By exploring these subjects with scholars and experts in their fields, participants of the Partner Program are challenged to think about the future of the Internet and its implications for society and how it will (or already has) impacted their lives, their families, their businesses and their communities.

## SAN FRANCISCO

The first visitors to the Bay area missed San Francisco entirely. In 1579, the European explorer Sir Francis Drake sailed directly past the Golden Gate and landed 35 miles to the north at Point Reyes Bay. Soon after, an expedition of Spanish explorers wrecked their ship on Point Reyes and again missed San Francisco Bay, opting instead to make their way to Acapulco.

It was not until nearly 200 years later, in 1775, that the first European, Juan Manuel de Ayala, entered the Golden Gate. One year later he was followed by Captain Juan Bautista de Anza, who built a presidio (fort) above the Golden Gate and the Mission Dolores that still stands today in the heart of the city's Mission district. A small village known as Yerba Buena grew up between these two landmarks and became the birthplace of San Francisco.

Yerba Buena was renamed San Francisco in 1847, one year before gold was found at Sutters Mill in the Sierra Nevada mountains to the east. At the time, the population of San Francisco was approximately 500. When the word of gold swept back east, thousands became infected by "gold fever" and left their homes and families (some even their values) behind to make their way west by land and by sea. Called 49'ers, for the year most made the journey, the population of San Francisco swelled from 500 to 25,000 in just one year.

In 1850, California became the 31st state in the Union and by 1854, San Francisco was a booming mining town with over 500 saloons and 20 theaters. Not surprisingly, it was during this period the Bay area gained a reputation for debauchery and became known as the Barbary Coast. This would all change, however, in 1859, when thousands vacated the mines of California for the Comstock Lode near Reno, Nevada, where the promise of silver squashed all memories of San Francisco gold.


## SAN FRANCISCO

No longer strictly a Gold Rush town, by the turn of the century, San Francisco had reconstrued itself as a vital financial center - banks opening where saloons had closed - and an important shipping port for America. With the completion of the trans-continental railway in 1876 the distance and time to travel between San Francisco and the east was decreased to a mere 83 hours and 39 minutes. Industrialists Collis Huntington, Leland Stanford, Charles Crocker and Mark Hopkins, drawn to San Francisco by the Gold Rush, were instrumental in building the Central Pacific Railroad and developing California's railroad system in the years between 1861 and 1900, a legacy which still influences transportation and politics in the state today. By 1900, San Francisco was a prosperous and ever-growing metropolis, part of the industrial era, with a citizenry nearing 350,000.

The "Big One", the earthquake of 1906, devastated San Francisco. While the quake was the most powerful ever to hit California, it was the fires resulting from it that left most of the city in ruins. And once again, San Franciscans rebuilt and reconfigured, and less than a decade later their city was back better than ever.

San Francisco experienced its second "Big One" in October of 1989. The damage was not nearly as severe as in 1906 but since then, the city has again experienced a decade of urban renewal - due in no small part to the "New Economy" and the spectacular growth of neighboring Silicon Valley. The Internet boom of the 1990s, like the Gold Rush of 1849, caused record numbers of fortune-seekers to pull up stakes and move West.

What comes next for San Francisco? Especially now that the dot.com bubble has burst and the Internet economy is at a crossroads? What can the global corporation learn from the city of San Francisco that has repeatedly re-built and reinvented itself? How will San Francisco sustain its growth and utilizes its resources in the coming days as it weathers the economic, political and physical challenges that lie ahead?

## INFORMATION 3:30 P.M. - 5:00 P.M.

*The Fairmont San Francisco*

The International Forum desk will be located in the lobby of The Fairmont Hotel on the afternoon of Tuesday, March 27, 2001. We encourage you to stop by and collect information and registration materials for the Forum. The Forum team is pleased to assist you with any questions regarding the program or the city of San Francisco.

During the Forum, there will be an information desk located outside of the main meeting room at The Fairmont Hotel on Tuesday evening, Wednesday and Saturday morning. While on site-visits during the Forum, please do not hesitate to direct questions to any member of the Forum team.

**The Fairmont San Francisco**

| | |
|---|---|
| 3:30 p.m. - 5:00 p.m. | Tuesday, March 27th, 2001 |
| 8:00 a.m. - 5:00 p.m. | Wednesday, March 28th, 2001 |
| 8:00 a.m. - 12:45 p.m. | Saturday, March 31st, 2001 |

Facsimile and telephone messages may be left with The Fairmont Hotel 24 hours a day, Tuesday through Saturday and with the Hotel Avante on Thursday, March 29th, 2001.

# THE DEATH OF DISTANCE

*Pavilion Room*

**LEADER:**

**Mr. Michael O. Alexander**
Chairman,
*The International Forum*

**GUEST:**

**Mr. J.S. Holliday**
Historian and Author,
*Rush for Riches: Gold Fever and the Making of California,*
*Carmel, California*


*Johannes Gutenberg*

How will the Internet change the way we think about geography? Will "distance" have a new meaning in the future?

Our perceptions of change and how it will affect us are often encumbered by the assumptions we hold unconsciously over time. How do we recognize these assumptions so that we can challenge them and understand the emerging new patterns that will affect us in the future?

This session draws on some of the inventions and developments in history and poses questions about the patterns that may again be recognized to help understand the changes of today.

- How did the first market square in Europe around the year 1000 change the way business was done at that time?
- The print revolution of the 16th century enabled a vast dissemination of knowledge. But it also caused surprising change through the new secular literature and opinions that challenged the status quo of the day. What similar kinds of surprises will come from the Internet?
- As the Gutenburg moveable type expanded learning in Europe, will the Internet provide the opportunity for millions in the developing countries to access knowledge and to join the modern world? How fast will this happen and what will it mean?
- The English language emerged during the past two centuries as the "Lingua Franca" because of the British Empire and its global reach and the rise of America - another English speaking nation. What will a community of 1.3 billion Chinese in China and 150 million ethnic Chinese in other parts of the world mean for language on the Internet?
- The California gold rush was not really about gold. What was it about? How might this be similar to today?
- The alliance of science and technology was an important factor in California's story? Why was this so remarkable in its time?
- The spirit of entrepreneurship, risk taking and the willingness to fail were essential to success during the California gold rush. Has this spirit anything to do with what has been happening here in recent years?

# BEER VS. WINE: A MARKET ON-LINE

*Pavilion Room*

**LEADER:**

**Ms. Nancy A. Doyal**
President,
*The International Forum*

**GUESTS:**

**Mr. Peter Byck**
President and Chief Executive Officer,
*The Winery Exchange, Novato, California*

**Mr. Rocco Rossi**
Partner,
*NPV Associates, Toronto, Canada;*
Former President,
*Beer.com*

Wine has its origins in the Neolithic Age, while evidence of beer can be found as far back as 4300 BC. It has been produced, traded and enjoyed for as long as humans have been on earth. How are the world's oldest businesses approaching the Internet? What opportunities have they discovered and what are their plans for the future?

Participants enjoy sampling some of the industry's finest product while contemplating the following questions:

- How have these industries followed their customers? What have they learned from how customers have changed their lifestyles and expectations that have translated into new products, services and brands?
- How important is your brand on-line? How should it be used?
- How have companies in the wine and beer industries used the Internet to change the way they market and distribute?
- What inefficiencies have they overcome?
- What new partnerships and relationships have they formed because of this?
- How has the "death of distance" enabled the innovators in the beer and wine industries to find new opportunities and create value for their customers?
- What new industries and opportunities may evolve from this adventure on-line for two of the world's oldest businesses?

*" The global wine market is estimated at $80 billion, and growth is facilitated by prosperity in many consumer markets. While the industry is currently highly fragmented, the efficiencies of data organization, transmission and retrieval via the Internet can help the industry in many ways. Some applications of online data management to the wine industry include: making supplier portfolios available on the Web, giving suppliers of any scale access to a worldwide market; reducing the cost and time of transactions; increasing the efficiency of transaction and financial record management; streamlining the fulfillment and shipping processes, and making detailed product information available to any tier of the trade."*

*"B2B Wine E-Commerce," Richard G. Leary, Vineyard and Winery Management Magazine (www.vwm-online.com).*

## BEER VS. WINE: A MARKET ON-LINE

*" Fermented beverages have been preferred over water throughout the ages: they are safer, provide psychotropic effects, and are more nutritious. Some have even said alcohol was the primary agent for the development of Western civilization, since more healthy individuals (even if inebriated much of the time) lived longer and had greater reproductive success.*

*When humans became "civilized," fermented beverages were right at the top of the list for other reasons as well: conspicuous display (the earliest Neolithic wine, which might be dubbed "Chateau Hajji Firuz," was like showing off a bottle of Pétrus today); a social lubricant (early cities were even more congested than those of today); economy (the grapevine and wine tend to take over cultures, whether Greece, Italy, Spain, or California); trade and cross-cultural interactions (special wine-drinking ceremonies and drinking vessels set the stage for the broader exchange of ideas and technologies between cultures); and religion (wine is right at the center of Christianity and Judaism; Islam also had its "Bacchic" poets like Omar Khayyam).*

*Whatever the reason, we continue to live out our past civilization by drinking wine made from a plant that has its origins in the ancient Near East. Your next bottle may not be a 7000 year old vintage from Hajji Firuz, but the grape remains ever popular-cloned over and over again from those ancient beginnings."*

*"The Origins and Ancient History of Wine"*
*The University of Pennsylvania's Wine Forum On-Line*
*(www.upenn.edu/museum/Wine/wineforum.html).*

## DINNER 7:30 P.M

*Penthouse Suite,*
*The Fairmont San Francisco*

## YOGA: ANCIENT SOLUTIONS TO 21ST CENTURY

To survive the physical and mental impact of the extraordinary demands upon corporate life, particularly at the top, many busy executives have searched for relaxation and stress relief with an exercise regime that often includes jogging and regular visits to the gym. There are older forms of physical and mental disciplines, however, that have been saving people from the ravages of busy lives for nearly 5,000 years. One that has caught on, particularly in the West, is the ancient Indian practice of Yoga.

The exact origins of Yoga are unknown, but it is believed to have originated in India and may have existed for as long as 5,000 years. The first traces of Yoga in civilization were found in the prehistoric Indus Valley, now Pakistan. Yoga was originally an oral tradition-it was a system of esoteric knowledge before the advent of physical postures and breathing exercises. Through verse or hymn, Yoga was passed from guru to disciples.

Buddha, the son of a king from the borders of India and Nepal, was born in approximately 568 BC. At the age of 30, he left the palace to search for enlightenment through the practice of Yoga. Yoga was then absorbed into Buddhist teaching and carried into Tibet, Srilanka, Thailand, Korea, Indonesia and China. The various forms that developed were not only intellectual exercises, but knowledge that was intended as a practical guide for living.

Since the days of the Beatnik revolution in San Francisco, Californians have embraced "new" (old) ideas from the East. Zen Buddhism was one that had a major impact on everything from literature to cuisine in the Golden State during the 1950s and '60s. The seated meditation posture of Zen is a Japanese interpretation of techniques for spiritual discipline in the Buddhist tradition that began in India from practices that were fundamental to Yoga. Yoga serves not only as a way to clear the mind and release stress, it also has many physical benefits. When practiced on a regular basis, Yoga may reduce stress levels, improve strength and flexibility, reduce blood pressure, provide a greater range of motion and improve blood circulation.

Although the current interest in Yoga throughout the US began on the West Coast, the willingness to change and experiment with Yoga is typical of American society in general and has led to some very practical and useful innovations in Yoga practice, some of which that may prove useful to participants will be introduced in a series of early morning sessions over the next three days.

# YOGA AND STRESS MANAGEMENT: HOW TO REDUCE THE PHYSICAL IMPACT OF STRESS

*Pavilion Room,*
*The Fairmont San Francisco*

**LEADER:**

**Dr. Joshua Feinbloom**
Clinical Psychologist;
Head of the Yoga and
Movement Workshop,
*The Mindful Body,*
*San Francisco, California*

Yoga is an ancient system of breath control and movement that has tremendous modern application. Sanskrit for "union," Yoga has been called a "toolbox" for spiritual, mental, and physical well-being. Yoga serves not only as a way to clear the mind and release stress, it also has many physical benefits. Yoga also serves to improve coordination, posture, flexibility, sleep and digestion. When practiced on a regular basis, Yoga may reduce stress levels, improve strength and flexibility, reduce blood pressure, provide a greater range of motion and improve blood circulation.

The first day of this three-part session on Yoga emphasizes methods of reducing the physical impact of stress, increasing energy, stamina and relaxation.

# ISSUES FACING THE PARTICIPANTS

*Gold Room,*
*The Fairmont San Francisco*

**LEADERS:**

**Mr. Michael O. Alexander**
Chairman,
*The International Forum*

**Ms. Nancy A. Doyal**
President,
*The International Forum*

The issues facing participants as they confront and consider the implications of the Internet are broad. They can be more easily understood, however as participants learn from how others see the opportunities and transformations taking place.

The International Forum in San Francisco is an interactive experience as participants play alternate roles in teaching and learning. The scope of understanding of the pattern changes taking place now varies from participant to participant. What one might see as a challenge, another has used as an opportunity. All the experiences of those who engage in dialogue at this Forum are relevant to the process for understanding and discovery. Now more than ever, the perspectives of those outside of business are also relevant to predicting the future. As the changes taking place are not only happening in markets and industry structures, but also in value-systems, systems of government, ideologies, special interests, science and technological inventions.

The "death of distance" and the massive disorganization albeit accessibility and abundance of information have ushered in an era that is completely unfamiliar to most of us. Information is available on subjects and people to a degree unthinkable fifteen years ago. Instead of being accessed through catalogues, encyclopedias, directories and other organized methods, the introduction of the "search engine" has trained our minds to seek answers and ideas out of chaos.

What questions should the leaders of global companies be asking now? And of whom should they be asking them?

- What are the different kinds of networks and what are their real potentials?
- Why are we doing what we are doing in the way that we are doing it?
- What have companies learned thus far about using the Internet and information technologies to solve problems and reinvent what they do?
- Where are others investing in the future? And how are they doing it?
- How will the Internet change the way we learn, how we organize information and how we seek answers and form new questions?

## ISSUES FACING THE PARTICIPANTS

- Where are the new ideas coming from?
- What will replace the organizational structures that we know today?
- What are the enablers of continued invention and innovation? What are the constraints?
- Who will set the rules in the Internet era and who will enforce them in the global society?
- How are different parts of the world adopting the Internet and communications technologies? What are the implications of this on the global corporation?
- Who will be the new stakeholders of the corporation in the Internet era and how will they expect to be managed, communicated with and served?
- What patterns in society, family, commerce, companies, government, science and organizations will disappear, as we have known them? What new patterns are emerging and will develop the future?
- What lessons can be learned from history and other times of change, discovery, invention and wealth creation?

During the four days of the Forum, participants will be asked to consider such questions as:

- How has the "death of distance" facilitated by the Internet changed the behavior and expectations of your consumers, employees and the communities in which you operate?
- How is the emergence of "passion driven groups" affecting the way that business is done and organizations are lead?
- What will you share - if you dare? Will you play by the rules of "open systems" and if so what opportunities will you find?
- What is important to understand about "speed" and how you use it?

# THE INTERNET ERA: WHERE WE HAVE COME FROM, WHERE WE ARE GOING

**LEADER:**

**Mr. Michael O. Alexander**
Chairman,
*The International Forum*

**GUESTS:**

**Dr. Kenneth DeWoskin**
Professor of International Business and Asian Languages and Cultures,
*The University of Michigan, Ann Arbor, Michigan*

**Mr. Scott Dinsdale**
Executive Vice President,
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**Dr. Kenneth M. Ford**
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*The Institute for Human and Machine Cognition,*
*Pensacola, Florida*

**Dr. James Taylor**
President,
*Taylor Associates,*
*Sante Fe, New Mexico*

**Dr. Yip Yan Wong**
Chairman,
*The Wywy Group,*
*Singapore*

The past three decades have dealt us some of the most remarkable changes. Many of the new technologies that have emerged would have been difficult to predict. But it is even more difficult to understand their broader implications for the way we work and live. Who had heard of the Internet in 1985? Who would have predicted that a concept of open architecture networking would turn out to be so key to the progress that has been made - that, in effect, a world of sharing discovery and development would overcome the conventional attitudes of wanting to control and protect new developments rather than share them? The now famous communications protocol, TCIP/IP, embodies the ground rules for a remarkably different organization system that we know as the Internet:

- It is open to independent networks.
- Each network stands on its own, and is not required to make any internal changes for it to connect to the Internet.
- The gateways and routers that connect the networks retain no information packets passing through them.
- There is no global control at the operations level.

What implications does the nature of this system have for the way we organize ourselves - in companies, communities or nations - in the future?

What is the meaning of a network today? It used to be people-to-people relationships that were established by personal contact, letters, e-mails and telephone; and it still is. But add computers that are attached to one another - one at a time - by IT experts in local area networks (LANs) that are only open to others as they are physically added. Then comes the Internet and the World Wide Web, a network that connects computers and other devices to sites anywhere in the world. Anyone can join this network if they have the piece of equipment, software and access to a telephone line. However, there is another kind of network emerging where, with the software, one person can signal the rest of the world that their computer is ready and open for "two-way" conversation. Once they connect, they connect with all the people who those people are connected with. It is like everyone you know, and everyone they know, and so on and so on, is one vast network. Instead of the people to people network of the past, you are now connected to a limitless network and open for two-way "conversation". This is the

## THE INTERNET ERA: WHERE WE HAVE COME FROM, WHERE WE ARE GOING

*"The Internet was based on the idea that there would be multiple independent networks of rather arbitrary design, beginning with the ARPANET as the pioneering packet switching network, but soon to include packet satellite networks, ground-based packet radio networks and other networks. The Internet as we now know it embodies a key underlying technical idea, namely that of open architecture networking. In this approach, the choice of any individual network technology was not dictated by a particular network architecture but rather could be selected freely by a provider and made to interwork with the other networks through a meta-level "Internetworking Architecture"…*

*History of the Internet, The Internet Society (www.isoc.org)*

concept on which Napster and the Gnutella software operates. How might this change the way we do things in future?

Will new technologies continue to arrive at the ever, faster pace we have been seeing? How do we deal effectively with this kind of world?

This session is designed to provide context in thinking about new paradigms.

**A. Where have we come from?**

- The speed of development of new information technologies has increased over shorter periods of time and along with it the general speed of life and work. Why? And in what way will it continue?
- What is the motivation behind the drive to develop new technologies at an ever-increasing rate?
- How much of what has happened has been driven by technology invention or is there a more fundamental shift in human aspirations and development taking place?

**B. Where are we today?**

- How have the developments of the past few decades strengthened our ability to build our future?
- How are we solving problems differently and how are we seeking opportunities now for the future?
- How will they enable us to continue the driving force of IT change?
- What emerging patterns can we identify?

**C. What is the Future?**

- What are the most important and most likely directions?
- What new states are we likely to reach?
- How might it change our business, personal and societal priorities?

**D. In Summary**

- Do we understand the forces that are driving change? (For example: the human desire to explore and discover, the dream to create a better life, the emerging roles of developing countries, how we learn and how our children learn, how we organize

ourselves to accomplish goals and how we organize the information we have access to.)

- What are the forces that are likely to constrain progress? (For example: Infrastructure in some parts of the world versus others, regulation, intellectual property protection, taxation, security, the health of the economy.)

What questions should leaders in business be asking about how the Internet and its related technologies will affect them and their companies in the future?

**Five Things That Are Still True About the Internet**

1. *Small teams work best.* Even within big companies, the best way to take advantage of Internet opportunities may be to put 50 people on a project, instead of 3,500. There will be lots of time to hire later.

2. *The Net allows you to get closer than ever to your customers.* Feedback - both positive and negative - now arrives in real time. Click-stream analysis, for example, helps companies understand customers'thought patterns as never before. That makes it imperative for companies to put such knowledge to work, fast, within their own organizations - because if they don't, their competitors will.

3. *Information travels faster than ever.* That applies to news events and, of course, rumors: Just consider the way the stock market fluctuates in response to new data. But it also applies to software, as we have seen with the stunningly rapid spread of Napster.

4. *Open systems become a lot more appealing than they were before.* With the Internet, it's possible to have the whole world debugging your software, suggesting new products, or providing customer service. That creates an intriguing alternative to the traditional "cathedrals of knowledge" - big, centrally run companies that do their development in secret and that share only finished products with the outside world. For now, though, both models are working well; it's too early to say which will dominate.

5. *Email remains the Internet's killer app.* It's simple and unglamorous, but email meets a critical set of human needs. In business settings, it lets people communicate quickly, efficiently, and cheaply - and whenever they want to. And the social implications of enabling so many people to be a mere email address away from one another keep growing all the time.

MARC ANDREESSEN, FOUNDER, NETSCAPE COMMUNICATIONS

*"Five Things That Are Still True About the Internet", Fast Company (www.fastcompany.com), February 2001.*

# REINVENTING BUSINESS

**LEADER:**

**Ms. Nancy A. Doyal**
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**GUESTS:**

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**Mr. Scott Dinsdale**
Executive Vice President,
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*Encino, California*

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Managing Partner,
*PricewaterhouseCoopers,*
*San Francisco, California*

**Mr. Alan C. Snyder**
Chairman, Chief Executive Officer and President,
*Answer Financial,*
*Encino, California*

The process of reinvention can be a radical one and perhaps not always necessary. It is likely that most global corporations as we know them now will continue to exist, gradually transforming themselves and taking advantage of the efficiencies and benefits that information technology and the Internet provide. The power of their brands will carry them through times of great change as will the foresight and creativity of their leadership…or maybe not. How will they know for sure until it is too late? What questions should they be asking and of whom?

The case of Napster is an important illustration of how a couple of young "outsiders" with a sense for the customer, enough technological know-how and very little to lose could completely challenge an accepted practice for doing business and throw a whole industry and related industries into chaos, not to mention legal confusion, in a matter of months. While the technology is exciting, perhaps what is more intriguing is that the people who developed Napster understood that customers would rather have the two songs that they like on an album rather than buy the whole thing and suffer through the other fourteen songs. They also realized the depth of people's tastes and preferences - which reached far beyond the selection that could be found in music stores today. The limitations of the traditional distribution channel of stores and the structure of music on an "album" were not meeting customers' music listening needs. Napster realized that this could be overcome if a very large community of music lovers made their own collections available to others in exchange for being able to select songs they were looking for as well. The Internet and the software that enabled the peer-to-peer networking of Napster could be said to have been the technological manifestation of a new understanding - that much more is possible now because we have found new tools to solve our problems with.

- What would your customers like to stop doing? How can you help them?
- What would your suppliers like to be able to do better?

Reinventing companies has never been easy - there is usually too much at stake. Not until someone comes along, whom you have never heard of, and takes it away from you - can you fully appreciate the opportunity you might have had.

*" Already transcending music, Napster's wildfire popularity is forcing whole industries to reconsider their business models. Companies are realizing that the last shelter for the digital economy may be imaginative strategies that make use of widespread file-sharing rather than fighting it, just as most content companies abandoned online subscriptions for free Web sites years ago."*

*"Napster Wildfire Spreads Beyond Music", CNET.com*

- How have some companies reinvented themselves or their industries? Are the changes that they are making incremental or whole pattern shifts?

**New Business Models and Practices**

- What lessons can be learned from those who have ventured out beyond their business or industry model? What are the primary drivers of new ideas in these organizations? How do they overcome the internal "antibodies" who are threatened by new ideas, slow them down or stop them completely?

The leadership accolades for both innovation and commercial success in the B2C space go to Amazon.com, still the dominant on-line retailer. From its beginnings as a bookseller, Amazon focused on the special capabilities of the Internet to overcome the skepticism of book lovers who believed they would never give up the pleasure of browsing in a real bookstore. Books were potentially the hardest and the easiest merchandise to sell over the web. Amazon's virtual bookstore experience made fast converts of millions, for whom Amazon literally did the browsing in a new and exciting way. In addition to being always open and always nearby, Amazon's site provided an information rich environment with professional and layman reviews, blurbs and summaries, tables of contents, data on sales, titles by the same author, similar books by different authors and so forth.

The Amazon transaction was notable for lightning-fast fulfillment, and the site was provisioned with refined navigational tools, many intelligent enough to save the user time, effort, and aggravation. In the process of a session or a purchase, Amazon made highly effective, real-time use of customer information to market other items and otherwise support buyers' decisions and up-sell. Virtual communities grow around reading interests and tastes, with customers able to add their views and voice to the discussion of a title or writer. It is a tribute to Amazon's original fine match of marketing strategy to product that its subsequent forays into music, video, and other products have proven unable to achieve as distinct a presence as its book business.

In the B2B space, an important innovator is Enron. Enron International had moved steadily from an oil and gas exploration and development company, to a pipeline company and then to a

capacity trading company. Entering the new economy, Enron established EnronOnline, an energy and commodity trading site. EnronOnline provides tools for customizing the user's information feed, filtering and organizing news, commodity and derivative prices, industry publications, and other information by any number of parameters. The trading world is divided into four large geographic blocks, North America, South America, Europe, and Australia/Asia. Main trading areas include power, oil products, weather, emissions, bandwidth, and pulp-all in all, fifteen. Powerful display formats provide realtime price quotes with price trend indicators, other descriptors of the products offered, and screens showing positions held. Growth in EnronOnline has been astronomical, and has led the company to a major strategic shift away from asset ownership toward pure trading activity. They are now heading toward the launch of several specialized sites, like ClickPaper.com just launched in Europe for physical and financial products related to paper and pulp. Launched Nov. 29, 1999, EnronOnline trading for the first six months of 2000 exceeded $50 billion in trades and had reached a level of $1.5 billion a day.

General auction sites and other dynamic pricing business models are unique Internet marketing models that build on the functionality of traditional classified ads and physical auctions. To these traditional models they add the sense of getting a definitive bargain, the thrill of competition, the value of a huge, global bidding community, 24/7 access and activity, and an extremely low cost of service and operation. The B2B section of dynamic pricing exchanges alone is predicted to grow over 170% to nearly $53 billion a year over three years by 2002.

e-Bay and Priceline are specialty sites for auctions and reverse auctions, but the format is proliferating across numerous web retailers, like Egghead and Amazon, who seek to tap into this rapid growth. e-Bay alone conducts over 4 million auctions a day now, without a single living person tapping a gavel. As an adjunct to the fast growing auction sector, a number of transaction support services have emerged, primarily responding to the need to facilitate payments and secure delivery in non face-to-face C2C and B2C transactions. These include PayPal, BillPoint, Escrow, iEscrow, and similar firms that process credit card payments and convert them into bank transfer or money orders, or escrow payment funds in a

process that resemble a letter of credit, and provide insurance against fraud or non-fulfillment. There is also emerging a number of so-called C2E and B2E services that link businesses and consumers to exchanges. Companies like Andale, AuctionWatch, BiddersEdge, and GoTo allow buyers and sellers to participate in up to 250 auctions through a single interface.

As the progress of the Information revolution continues, new industries will emerge that have nothing to do with the IT and technology companies that are active and successful today. From where will these new industries emerge? What clues can companies gain from their stakeholders as they change with the world around them that provide ideas for future businesses and opportunities?

**Back in the Bazaar**

*"In the beginning there were markets. We traded. People exchanged goods for goods, and then goods for money. Price became the carrier of information. In the local bazaar, all the information was available at your fingertips. You could see, feel and smell the tomatoes, fish, jewelry or whatever. But as products got more complex and geographical distances increased, information became scarcer and feedback slower. Uncertainty exploded. Markets began to experience problems.*

*In response, we began to build hierarchies and formed them into organizations. We made stuff in-house rather than buying it from someone else. Markets and hierarchies basically fulfill the same function - they handle human exchange. In reality, companies are nothing more than private planned economies. Man rather than money coordinates them. They are rules by plans not price. Long-term contracts dominate at the expense of constant negotiations. The advent of hierarchical organizations meant that uncertainty could be artificially reduced. It worked. The efficiency gains were sometimes enormous.*

*In an information desert, companies rule. But now we are entering an information jungle where information is again available at our fingertips. We are back in the bazaar - though this time it resides in cyberspace, the net neighborhood."*

KJELL NORDSTROM AND JONAS RIDDERSTALE
*Funky Business, 1999.*

# YOU AND YOUR CUSTOMER - REINVENTING MARKETING AND DISTRIBUTION

**LEADER:**

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**Mr. Vivek Kapur**
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The marketing and distribution of goods have been permanently altered by the appearance and rapid growth of Internet enabled e-commerce. But the sharp ups and downs experienced by both pure e-commerce retailers and traditional bricks and mortar merchants who have gone on-line create uncertainty about many aspects of the future of marketing and distribution over the Internet.

What is certain is that we are experiencing the reinvention of marketing in the e-commerce revolution. Business strategies focus on the art and technologies of customer relationship management, aimed at providing the best customer experience through the entire process of initial engagement through delivery of the goods or services to after-sales support and other forms of follow-up. The driving force is a simple mantra of three demands for fulfilling customer needs: better, faster, and at less cost. New levels of performance in supply management and demand management are compelling companies to innovate continuously across all front and back office operations to stay in the game.

## Meeting the Customer

The unique capabilities of the Internet-based interface support entirely new kinds of customer relationships. These have been ingenuously exploited by leaders in all types of e-commerce, who have over the last three or four years created a dazzling number of sites and innovations in on-line sales and marketing. A website can be both the site of a transaction, local and intimate, and a powerful, marketing channel, projectable around the globe. Customized, information-intensive, efficient, and appealing websites are the one and only only place a B2B, B2C, C2C, and C2B player will meet its customers.

The web has proven to be a powerful system and set of tools for marketing goods and services, supporting transactions across the supply chain, and conducting marketing research. It is estimated that 7% of all customer research is now done on-line. And while during the sunny days of 1999 and early 2000, fast growing, cash-rich e-commerce players advertised heavily in traditional press and broadcast media, ultimately, their strongest marketing tool is the Internet, their own websites, and the co-location and co-branding activities they structure with other sites that can direct eyeballs.

**Mass customization**

Under the general rubric of mass customization is a range of processes that are altering the entire set of supply chain relationships, including that of the retail buying experience with the manufacturing process. For major products, like automobiles, build to order concepts have been discussed for some years. But while the complexities of specifying a build to order car system are still being worked out, the impact of mass customization marketing strategies on a wide range of consumer products is already becoming clear.

Of course the portals, ISPs, and other information providers are by nature mass customizers. Yahoo, MSN, AOL, and all major portals and ISPs provide customized feeds of news, sports scores and stock quotes. Napster supports individuals selecting music song by song and creating whatever configuration they want in a sustained program. These do not involve the creation of new content but the packaging of an existing inventory of content according to knowledge of the consumer's interests and needs.

But clothing manufacturers have already taken the mass customization process onto the factory floor. Levi's "Make Them Your Own" program feeds seven measurements that an in-store service person provides for a customer into the production order system to manufacture customized jeans for the consumer. Nike's ID program permits customers to assemble the color combinations they want and select a name or message that is sewn into the shoe. Reflect.com is promoting a customization business for women's cosmetics. By collecting physiological, demographic and other personal information from its shoppers, the company is able to create shampoos, lotions and lipsticks specially designed for each shopper.

Concept-leading Interactive Customs Clothes Company Designs (IC3D) offers a range of clothing and accessories built to specifications for each customer. A common enabling technology for many of these marketing strategies is the virtual model, which essentially permits the customer to put a virtual version of this or her body in the manufacturing site of the company. MyVirtualModel.com permits one to build a metric relica of one's body on-line and

submit or permit it to a growing group of manufacturers and direct marketers. This on-line body, complete with hair and skin color, will permit customers to order custom tailored clothes, or virtually try-on catalog clothes for fit, style, and color.

**Logistics**

The landscape in distribution has transformed, with rapidly growing direct to consumer logistics services addressing the fulfillment needs of on-line retailers. Among the earliest and most successful sectors are those that require no physical delivery. Airline ticket sales and other travel sales and reservations services, event ticket sales, stock brokerage, software, telecommunications services, on-line banking, and other financial services, and financial, weather, sports, and other commercial information services are examples.

Retailers of physical goods like Amazon and others learned early, certainly by the Christmas season of 1999, that traditional distribution systems were not well suited to e-commerce. e-Toys, relying on Fingerhut's distribution system, was unable to meet demand and undertook to build its own. CD-Now and others followed suit. Bricks-and-Mortar firms moved goods in bulk on pallets, and let customers manage their own distribution from the store to their homes. Catalog retailers enjoyed an advantage here, as they were already geared to retail delivery. UPS was a major beneficiary of the boom in the first years, before FedEx understood that e-commerce fulfillment was an essential business for them to replace deteriorating document delivery volumes.

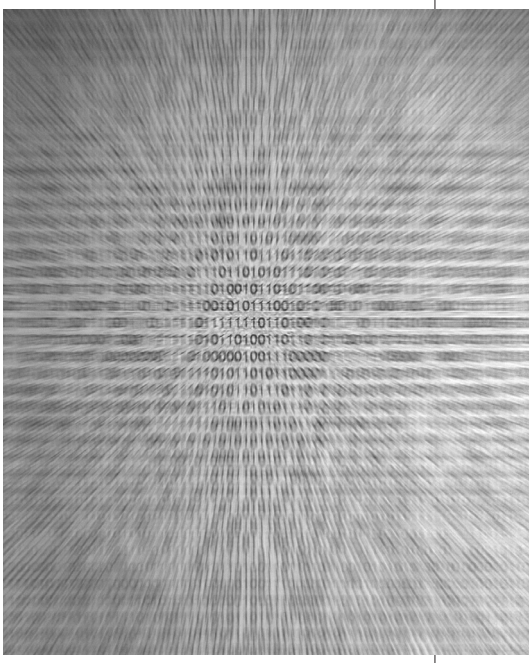
Streamlined, independent pick and pack warehouses have grown quickly and serve as transparent regional distribution points for big volume resellers. As these businesses gain experience, the risks of outsourcing pick and pack functions have declined. Other businesses, like on-line grocery sales, have discovered that timely and well-timed delivery are critical success factors, and these core functions have become for some a main focus of process development. On-line grocers like WebVan may be positioning themselves to compete as local delivery businesses with the traditional delivery companies.

## YOU AND YOUR CUSTOMER - REINVENTING MARKETING AND DISTRIBUTION

**Looking Ahead**

The world of digital delivery, goods and services that can be delivered directly over the net, will expand beyond the domain of e-tickets on airlines and financial services. It is already increasingly commonplace for music and video. Issues in copyright protection notwithstanding, investment in digital download technology is growing very fast. Digital delivery may someday supplant the current physical delivery of books and all paper-based reading materials, as is already happening with companies like NorthernLight. How fast that process moves ahead depends on resolving issues with copyright control, parallel developments in electronic books or readers, and the speed with which consumers are willing to give up the comforting crinkle of paper for their fiction and their news.

Everywhere governments are confronting a host of regulatory issues that will impact the future of Internet marketing. Privacy issues may be foremost of these. E-commerce marketing service companies, like DoubleClick and Engage, are involved in a delicate regulatory and public relations process, working to grow the value of their services in on-line preference marketing, which attempts to direct marketing messages to the most likely buyers by tracking and analyzing historic on-line behavior. But they have already raised the sensitivity level of consumers and privacy advocates, who rallied with vigor when last year DoubleClick announced their intent to link non-identified marketing profiles with individual names. Surveys have indicated that a majority or plurality of consumers of all ages feel the use of cookies is more harmful than helpful. The association representing the on-line marketing industry, Network Advertising Initiative, advocates self-regulation and is responsible for the existing privacy disclosure policies large websites follow. But a significant group of adversaries claim this is completely insufficient, and are urging major new regulatory initiatives to regulate the use of cookies and instruments for collecting consumer information.



Finally, the future of marketing will be impacted by the proliferation of access devices. While much attention has been focused on alternative access channels for the home, e-

## YOU AND YOUR CUSTOMER - REINVENTING MARKETING AND DISTRIBUTION

machines and set-top boxes, for example, from a marketing standpoint, more interesting are out-of-home and mobile access developments. Wireless Internet for mobile phones permits marketers to direct messages to cell-phone owners responding to inquiries about goods and services, or proactively by determining where the phone is at a given moment. ATM machines are being used as marketing devices, to provide marketing messages and even merchandising coupons, since they know exactly where a customer is standing and that the customer has a new bundle of cash in hand. Experiments with ATM based Internet sales have included everything from the sponsoring bank's own financial services to gift certificates, take-out food, theater tickets, stamps, and prepaid phone cards.

Perhaps the overriding question is how "disruptive" are the new technologies associated with marketing and distributing in the e-commerce world? And what will be the optimal scope and service mix of the future e-commerce marketers and distributors? Traditional retailers who have invested in locations, personnel, and support systems for traditional retail have good reasons to be judicious before moving resources into e-commerce channel development. Inside, they have fear of cannibalizing their own market bases, worrying the financial markets, creating extreme organization and process improvement demands, and learning new technologies. Externally, they have concerns about new regulatory problems, long-term sustainability of fast growth, entering a potentially low margin fray, and degrading brands and shopping experiences. But are they good reasons? And how big are the risks of not moving forward into the worlds of Internet marketing and distribution?

## LUNCH 12:30 P.M.

*Pavilion Room,*
*The Fairmont San Francisco*

# THE ORGANIZATION, VALUES & EXPECTATIONS

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**GUESTS:**

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**Mr. Barry O'Connell**
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**Mr. Rocco Rossi**
Partner,
*NPV Associates;*
Former President,
*Beer.com,*
*Toronto, Canada*

The era of the dot.com and the mobility of the younger workforce have created a crisis of sorts for the global corporations as they have sought to attract and retain high quality employees in a very competitive environment. How much of this was a result of a booming technology market versus a fundamental change in what employees expect for themselves and the organizations for which they work? What are the long-term changes taking place in society and in individuals that will continue to re-define how organizations are structured and how they work?

**Values and Expectations**

The 1990's produced a decade of tremendous momentum for a change in values and expectations among the workforces of the world that now has significant implications for the global corporation and how it organizes and manages people. Shareholder capitalism has forced companies to seek gains in efficiencies in many cases by cutting back on bloated workforces, divesting lines of business, consolidations and re-aligning work while replacing human processes with technology and IT systems. It is thus no surprise that the employees of the global corporation have decided for themselves to take control of their own careers, no longer relying on the corporation for their future. The loyalty between employer and employee has gradually been replaced by a market-driven approach to talent.

While some employees learned to adjust their values and expectations after the rules had changed, many of the future leaders and senior management "hopefuls" in their 20's and 30's, have not lived or worked in a system where corporations and owners of capital expect loyalty in exchange for a meaningful career, state of the art training and education, resources, social respect and compensation that lasts into retirement. In fact, some say that the global corporation is not the place to find these benefits anymore. A meaningful career can be cut short by lay-offs; state of the art training is better found through organized or self directed distance learning over the Internet, or more recently through communities of interest or experts; resources in large corporations are given sparingly and sometimes not given to new ideas and innovations unless a six month rate of return can be shown and finally a new hero of commerce is emerging - the person with an idea of their own, with passion and vision - willing to work with others at

creating something that makes a meaningful difference in the world, not necessarily maximizing shareholder value as a top priority.

- How are companies recognizing these and other changes in values and expectations and what have they done about it?
- Will the traditional hierarchies of management and executives be an acceptable structure for "knowledge workers" in their 20's and 30's? How much longer will they tolerate it?

The increase in desire for flexibility comes in part from individuals wanting to have control over their future and their options. But it is also an indication of a choice in lifestyle. It is a choice to spend more time with family, friends, hobbies and other things that are important to people. Have we de-humanized the work environment? At what point did we decide that what we do at work is more important than the other things we value in life? Could it be that the knowledge worker sees their role in work and life as different? What does their "work" represent for them and in what time frame?

With the availability of on-line recruiters, the Internet has further changed the dynamics of switching jobs. The cost to switch is significantly lower as job availability and information on candidates is accessible within seconds for anyone with Internet access. Monster.com, one of the leading on-line recruiters has approximately 1 million hits to its site in a day. It has 18 million resumes posted on its site and almost 500,000 jobs posted.

- Is compensation sufficient to retain employees in such an environment? How are organizations using information resources to identify and attract and retain potential employees?
- How is this technology used within global companies to identify candidates and match them with other opportunities around the world? Where are the future opportunities?

**Organization and Structures**

Within organizations, there is a dis-intermediation between employee and leadership. This is happening as technology and the Internet are making information, which was once limited to certain levels of management, available to each employee. It is also happening as some organizations have recognized that employees

want to be part of developing the future of the enterprise and have enabled a dialogue between all employees and senior leadership in real time to discuss this.

- How have some companies used the Internet internally to create employee systems and resources that not only provide information on benefits, employment, training and other resources, but also a dialogue between levels of management which has translated into ideas and action?

The very notion of a traditional job description implies that the organization has set boundaries within which it expects an employee to perform. A list of responsibilities and the skills required to do them are used to describe someone's role and a title is assigned. What happens when the employee in this role discovers that they can do much more or perhaps something quite different? It has been said that "people are capable of doing one hundred times more than we let them". How does an organization recognize this and structure itself so those employees can pursue their strengths, their interests and new ideas in the interest of expanding the capabilities of the company?

- Is there an alternative model to the "job description" which enables employees to change their job definition over time as they develop their own interests and capabilities? How might this benefit the large corporation and in what directions or to what new ideas might it be pushed if employees were allowed this freedom to work towards their strengths as opposed to the role that management defines for them?

Some companies in the technology sector have discovered that what is really happening to them is that management actually works for its subordinates. In effect, their organizations feel like inverted hierarchies. Their subordinates, who sell to or work with customers on a regular basis or design products, demand that their management provide the resources, support and quick decision-making that they require in order to best serve their customers. What is the evolving role of management in such an organization? What would your company look like if the junior managers reviewed their bosses, evaluated them on how well they served the customer or helped others serve the customer and determined how they should be compensated?

The demands on the global corporation require it to constantly seek points of balance. How global or how local should it be in products and people? Where is the balance point between structure and creativity? How much process is needed in order to facilitate an innovative environment? When is too much structure oppressive? When is too much innovation and creativity chaotic? Where is the balance between creating organizations that people believe in and want to belong to while still delivering returns to shareholders that the market demands? Where are there diminishing returns to higher compensation levels for the individual, and more return from other aspects of the work environment such as a passion for what they are doing, the group or community they belong to at work and other issues of personal importance? How is your organization structured to seek and recognize these balance points and change with them as they change? What kind of leader and manager is most effective to help you do this?

**The Work Environment**

The popularity of the dot.coms introduced a number of changes to the workplaces of the world. Many organizations in an effort to copy what they saw in "popular" companies, did away with ties and jackets and introduced the business casual wardrobe, creative and personalized work spaces, flexible schedules, pool tables in the office, pets at work and many other initiatives designed to show that they were responsive to change and open to creating a fun work environment. How much of this has really been successful at retaining and attracting employees? Has it really created an environment where new ideas flow more easily and things get executed at "Internet speed", or is there something more fundamental changing in the workplace?

- How have companies created environments that are fun and conducive to unusual, creative and high value work?
- How does the space and layout of the work environments of different companies support the value systems and types of work that has to get done there? Does the work space in your company support or inhibit what you are trying to accomplish?

## THE ORGANIZATION, VALUES & EXPECTATIONS

A number of leaders of large organizations have asked the question: How can we make coming to work more fun?

- Should work be fun? What do we mean by fun? What does it mean for the "knowledge worker"?
- What would happen if the people in our organizations all started having a great time when they went to work? What would we accomplish? What would we stop doing?

# INVESTING IN THE FUTURE

**LEADER:**

**Mr. John Abrahamson**
Chairman,
*Sörmland Skåne Handels AB, Sweden*

**GUEST:**

**Dr. Alain Rappaport**

Founder and Chief Executive Officer,
*Medstory Inc., Burlingame, California*

With the froth of NASDAQ going flat and the gold of tech stocks losing its luster, where will we invest in the future?

Where do those who invest their own capital, their own time and their own ideas believe the future opportunities will lie?

How are companies investing in their own futures? Will Information Technology continue to be the area of great focus? If not, what would be the reason?

What actually happened in the capital markets?

The Equity capital markets have been spectacular. For several decades, investments in the capital markets focused mainly on developed companies and industries - what we today call "traditional industries"- using conventional and well-known methodologies. But during the 90's, investments turned increasingly toward start-ups, new companies and the new economy. This happened first in the North America but Europe and East Asia soon followed.

Investments in "the new economy" continued to increase in value to levels that few understood. The future was discounted to very high valuations and fortunes were made. In the end, more and more people were carried away, ignoring good sense. As prices collapsed the market went from where most investments were given more than the benefit of the doubt, to a market where almost none were in favor. Valuations changed dramatically.

Do we conclude that valuations had increased to levels far beyond reason and that they had to come down? Was it because our estimates of timing had proven to be wrong? The expectation of how long it would take for new businesses to perform, to deliver a return, have been proven unrealistic. Investments are consequently valued significantly lower today.

What happened over the last few years? Why and how, and what is happening now?

- What are the capital markets investing in today compared to a year or two ago? Are they the same businesses, people and technologies at lower values or is it something quite different?
- How are investors valuing new ideas, new companies now? What

are the key factors they are considering in valuing opportunities and how has this changed? Have we gone back to the traditional ways or are we seeing a new way? Or are we just confused?

- Why has this changed? Is it only because valuations were far too high, or is it because we did something else wrong? Do we now have a different view on how long it takes to build a new and profitable business today? Are we still too optimistic on timing? What have capital markets learned from the experiences of the past two years? In what ways have the markets changed? Are they better now and, if so from whose point of view - the investor, the new venture, the corporation?

**Venture Capital**

Risk or venture capital is an integral part of building new businesses. There has never been as much risk capital around as there is now. The focus on changing technologies and the number of start-up ventures has increased the numbers of risk capitalists, making them a significant and powerful profession. Are they the gold-diggers of our time? Are they very different from those who provided risk capital in other times?

How well is the venture capital market working? Is it too exit-focused? Are venture capitalists in too much of a hurry to be good for the businesses they are financing? Do they put undue pressure on start-up ventures to make optimistic forecasts of their future so that, as venture capitalists, they can make a quicker exit?

What sectors, industries and trends are most attractive to venture capitalists today? Once at the top of the list, e-commerce and Internet services are now out of fashion. Are mobile Internet, wireless networks, microprocessors, artificial intelligence, outsourcing now the focus? Where do risk capitalists invest their money today and why? What comes next?

It is most unlikely that the new ideas of today will suffer from a lack of risk capital. In the United States, $16 billion of venture capital was invested in the third quarter of 2000, more than in the whole of 1998, or any year before that.

**Institutional Investors**

How have the more traditional investors like mutual funds and insurance companies reacted to the developments over the past few

years? Where do institutional investors invest their money today? What sectors, industries and trends are most attractive and what criteria are used? How do institutions look upon new technologies and new businesses and how has this changed with the market decline over the last year?

The way we invest - is it changing?

How do investors value companies in the traditional industries? Has this changed over the last few years?

Is there a herd instinct at work, where everyone does the same thing, without enough original thought or initiative and variety? Does this leave some types of businesses without access to capital at reasonable cost?

What can we discern about the future from the pattern of where investments are made? Are they just spread over a large number of new ideas of which some will succeed and some will not? Are investments leading indicators or are they a consequence? How much do they tell us?

At few times in history, so much time and money has been invested or spent on so many new businesses and new ideas. Can we take this as a guarantee that change will continue to be significant?

How do each of us invest in the future?

**Implications for the corporation**

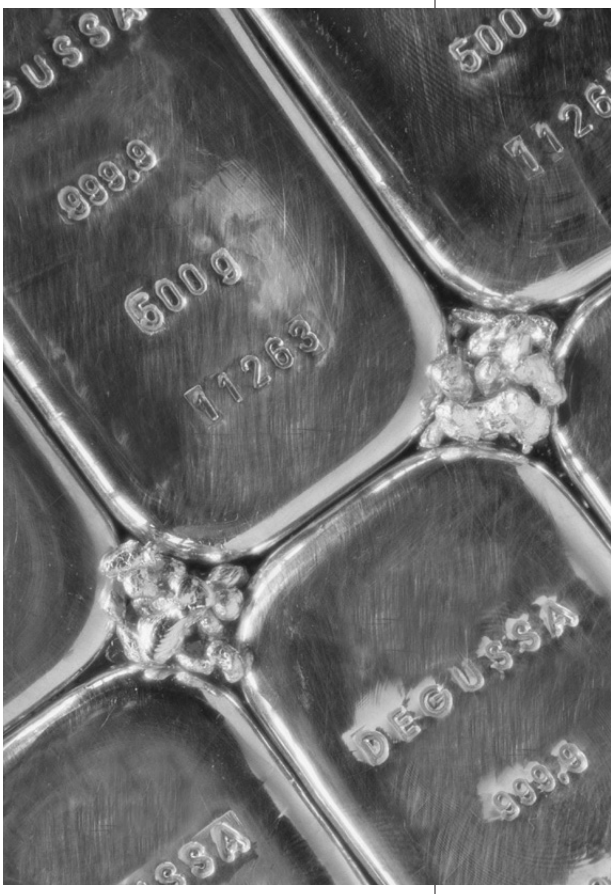
In times of great change it seems that almost all new products and services are invented, developed and taken to the market by entrepreneurs, and frequently in start up companies. The "new" things do not appear to be coming from the established corporations with the greatest resources. It seems that the larger, well-established institutions are much more focused on cost-savings, rationalization, and streamlining, rather than on developing new ideas, products and services for the future. They allocate resources to doing what they do better, or cheaper, rather than doing something new and different. Which of these is more likely to ensure their longer-term growth and survival?

## INVESTING IN THE FUTURE

But large corporations still do invest in the future. They do so internally, in projects or procedures, and externally, by acquiring start-up businesses as strategic investments, or through their own corporate venture capital units. They are investing not only in businesses but also in people, technology and brand recognition.

What are companies investing in today for the future? Does this depend on the industry or is the trend similar for all? How has this changed over the last few years?

How do companies identify, evaluate and decide what to invest in? What is the process for allocating capital, but also time, focus and information? How is this done very differently in different companies? What are the most effective ways to ensure that the company can identify, evaluate and implement investments in the future, in the broader sense? How does creativity prosper within large corporations? Is it all about creating the right culture, incentives and rewards, or is it something else - such as vision, sense of mission or fulfilment? Are companies now actually focusing more on investments in the future?




What can companies learn from the Capital markets about what to invest in and how to evaluate investments?

# MYSTERIES OF THE SILICON VALLEY - INTRODUCTION

**LEADERS:**

**Mr. Michael O. Alexander**
Chairman,
*The International Forum*

**Ms. Nancy A. Doyal**
President,
*The International Forum*

**GUESTS:**

**Mr. Alfred Amoroso**
President and Chief Executive Officer,
*CrossWorlds Software,*
*Burlingame, California*

**Mr. Timothy Brown**
President,
*IDEO,*
*Palo Alto, California*

**Dr. Kenneth M. Ford**
Director,
*The Institute for Human and Machine Cognition,*
*Pensacola, Florida*

The lessons from the Silicon Valley have been sought by many from around the world who have come in groups recently to try to discover for themselves the magic answer to their own questions about what the future will look like and how to be successful in it. But nothing is ever as simple as it might seem.

The Valley's own history may be part of the reason for its success in producing some of the leading technology companies today. Over the past four decades, the combination of the presence of the US defense department, NASA and Stanford University and the enormous selection of engineers and inventors that the area has attracted must have certainly accounted for a large part of the phenomena. Also to be considered is a value system which favored individualism, rebellion, entrepreneurialism and anti-establishment - from the time of the Gold Rush, through the beat generation and to the battles between upstart Apple Computer and the monolith of IBM. Even today in San Francisco, the individual who strikes out on his own with a company that has no name can garner as much respect as someone can with a big title in a global corporation. This is the land of dreams and possibilities - perhaps that is what attracts us most to it.

In recent years, Silicon Valley - which most will see as just a highway with exits leading to long busy roads with strip malls and stoplights, devoid of culture and appeal - has attracted some of the world's brightest and most promising minds. They have left behind jobs in well established, respected organizations and come here to achieve something. What have they discovered here? What will they take back home with them? What did they create in the process?

To understand the phenomenon that is the Silicon Valley - it is critical to go there and meet the people who live and work there. What are the values and expectations of those who work there? How do they measure personal success? How do they view the role of their organizations? All that it is and all that it is not - must be considered when trying to interpret what is significant about this for the global company and its future.

## MYSTERIES OF THE SILICON VALLEY - INTRODUCTION

*" Geology surely was destiny in the Sierra Nevada; without it, there would've been no Gold Rush. But Silicon Valley? Its location has no strategic value. Gold came from the land itself, just as oil and soil and water were physical gifts. The phenomenon of the Valley isn't tied to any such thing - indeed, silicon is Earth's second-most abundant element - resting instead on intellectual resources. The newest frontier isn't in a mine, but in a more ethereal place called cyberspace."*

DAVID A. KAPLAN
*The Silicon Boys and their Valley of Dreams*

Visits to companies in the Silicon Valley and NASA Ames Research Center provide face-to-face encounters with people where they work, in the organizations to which they have chosen to belong and to contribute.

Each provides an example of a different type of organization from software development to product design to space exploration and support for human gene research. As they meet and speak with people who lead and work in these organizations the participants will be asked to consider such questions as:

- What is the company/organization for? By what means does it measure its success?
- Who are the people who work there and how are they organized to accomplish their objectives?
- How do they create ideas and what structures or processes do they use to help them?
- Why do people want to work there?
- How do they learn?

Leaders from each of the organizations will provide a brief introduction to the people and places participants will visit over the next two days.

## CONNECTING OFF-LINE 7:00 P.M

*Restaurants of San Francisco*

Participants have the opportunity this evening to dine together in smaller groups, more conducive to a relaxed conversation and their involvement in a deeper exchange of ideas and questions on their minds.

This evening, small dinner groups have been arranged for this purpose at a few well-regarded restaurants in San Francisco.

# HOW TO INCREASE CONCENTRATION

*Garden Room,*
*The Fairmont San Francisco*

**LEADER:**

**Dr. Joshua Feinbloom**
Clinical Psychologist;
Head of the Yoga and Movement Workshop,
*The Mindful Body,*
*San Francisco, California*

The constant demands of a hectic schedule make it difficult for business leaders to remain focused on the larger vision. Leaders must have the ability to focus in the midst of chaos and change. Yoga offers practical techniques for developing this ability to find one's center, focus one's attention, and cultivate a consciousness of the bigger picture.

The second day of this three-day session on Yoga emphasizes methods of focusing attention and concentration for extended periods.

# COMPANIES OF THE SILICON VALLEY

*CrossWorlds Software*
*Sun Microsystems Inc.*
*IDEO*

The experiences of companies encountered in the Silicon Valley provide a perspective on many of the issues and opportunities that face the global corporation today.

- What lessons can be learned from these enterprising operations?
- What do these companies consider to be their main purpose in business?
- How do their attitudes and values differ from other parts of the world?
- Do they aspire to be major global competitors? How do they approach this opportunity?

These companies have been born out of an era of change and information. Do they have certain advantages in addressing change and the potential of technology that others do not?

What are their key strengths and what problems are they facing that are most significant? How are they dealing with them?

Who are the people that work for these companies? What are their aspirations and expectations? How do the organizations in which they work integrate this into how they operate?

Some of the questions and topics that participants may wish to discuss with the management and employees of these companies include:

- How does the company measures its success?
- Who is the company accountable to? How is it governed? How is this changing?
- How are decisions made in the organization and what is the management style?
- How are new ideas and products developed?
- How are people developed and why do they stay/leave?
- What are their objectives for growth and where do they see their biggest opportunities to make a difference?
- What is the company's relationship with the community in which it operates?

**GUEST:**

**Mr. Alfred Amoroso**
President and Chief Executive Officer,
*CrossWorlds Software,*
*Burlingame, California*

## Company Profile - CrossWorlds Software

CrossWorlds provides business integration software to extend and unite a company's evolving business processes. Their products help to streamline and improve internal operations and trading relationships through a cohesive business process management approach. With a patented, unified architecture for integrating processes within and outside the firewall, these products are designed to reduce information technology costs, increase productivity and improve responsiveness to customer demands.

CrossWorld's business integration software is comprised of: prebuilt solutions including process integration modules and connectivity to packaged and legacy applications, business objects to support common business processes, and a robust toolset for integrating to custom and legacy systems as well as extending and customizing business processes. These CrossWorlds products are built on a modular integration architecture to support a broad range of enterprise and e-business integration requirements, including scalability, reliability, security and manageability.

CrossWorlds sells and markets their products primarily through a direct sales force that targets the Global 2000 in selected industries, including Industrial Manufacturing (high technology, process, aerospace/defense), Financial Services and Telecommunications. Additionally, they utilize their relationships with global systems integrators and software providers to support the sales and implementation of their products in these and other markets. Customers include companies such as Applied Materials, Delphi Automotive, Dow Chemical, Ingersoll-Rand, Nortel Networks, Norwich Union, Roche Group, Sony, Siemens AG, U S WEST and Whirlpool Corporation.

CrossWorlds first offered what they refer to as "processware"-packaged business process integration solutions - in 1996. CrossWorlds is considered an early pioneer of the EAI (Enterprise Application Integration) market. Packaged integration and the CrossWorlds approach was considered visionary at a time when most potential customers looked to custom-built, point to point integration fixes to solve more rudimentary integration projects. Today, many more companies understand the implications of the Internet and understand that their businesses require sustainable business process integration architecture to link systems and

partners together, and look to CrossWorlds to provide business integration solutions.

CrossWorlds Exchange came online in April 2000. It is a fully secure Internet based resource that has been made available to the partners and customers of CrossWorlds. The exchange offers an online repository of tools, utilities and products - as well as access to a best-practices information exchange. In addition, CrossWorlds offers customers insight onto their own engineering and development processes that they utilize in-house. All of this, they believe, contributes eventually to the growth and development of their own "open-architecture". Customers who have made improvements to their own companies CrossWorld's products typically provide back the information and technology to CrossWorlds. The Exchange currently has over 500 customers and partners leveraging the Exchange and serves as the central knowledge management repository for all CrossWorlds employees.

**GUEST:**

**Mr. Larry Weber**
Vice President, Compiler and Performance Technologies, Systems Product Group,
*Sun Microsystems Inc., Sunnyvale, California*

## Company Profile - Sun Microsystems, Inc.

Sun Microsystems was incorporated in February of 1982 with four employees. From the first day of operation, all of their systems included a network interface and employees were using electronic mail. Their very first workstation introduced that year included TCP/IP - the Internet networking protocol. Since this time, Sun has established many of the protocols that propel the Internet, including NFS (network file sharing technology), PC-NFS technology, which enabled PC users to become networked and opened up an entirely new market for the company, and Java technology.

Sun had their initial public stock offering in 1986 and one year later reached $1 billion in revenues at an unprecedented growth rate.

In 1995, Sun introduced the first universal software platform, designed from the ground up for the Internet and corporate

*" I have long maintained, for instance, that it's just as easy to separate the good guys from the bad guys in the high-tech industry as it was in the old Hollywood Westerns. The good guys are the ones who openly publish their programming interfaces, so anyone can make a compatible product. That's the modern-day equivalent of wearing a white hat.*

*Openness is both a requirement and a catalyst. It's the key to compatibility and choice, and it's the driving force behind many of the changes businesses (ours included) are experiencing today.*

*By moving business processes to open Internet standards, we're able to bring together employees, partners, suppliers, customers - and anyone else we encounter along the value chain - like never before.*

*Let's face it, business has always been about building relationships - even the Internet can't change that. The Net simply provides a way to build stronger relationships."*

SCOTT MCNEALY

*"E-Business Beacon: The Net shines a light on old values in a brave new world.", Scott McNealy, Chairman of the Board, CEO, Sun Microsystems, Inc., PSINet eBusiness, Winter 2001*

intranets. This Java technology enabled developers to write applications once to run on any computer. This software was licensed to all major software and hardware companies the following year. Interestingly, NASA engineers utilized Java technology in 1997 to develop an interactive application allowing anyone on the Internet to be a "virtual participant" in the space administration's groundbreaking mission to Mars. In 1998, Sun introduced Jini technology, which enables all kinds of devices to connect to the network - instantly. Just plug it in, and it works. This same year America Online acquired Netscape and in March 1999, Sun and AOL formed a strategic collaboration, iPlanet E-commerce Solutions, to accelerate the growth of e-commerce and develop next-generation Internet devices.

Sun currently has offices in over 150 countries and is a $9 billion leader in network computing. Their service division supports over one million systems worldwide. More than half of the medium to large companies world-wide use Java Technology. Currently, over 80 percent of the Internet backbone traffic, 54 percent of ISP's and more than 72 percent of e-commerce implementations by the top five vendors run on Sun. Sun continues to foster alliances and relationships with other companies world-wide in their effort to offer a large portfolio of computing and Internet solutions to their customers.

## COMPANIES OF THE SILICON VALLEY

**GUESTS:**

**Mr. Timothy Brown**
President,
*IDEO,*
*Palo Alto, California*

**Mr. David K. Haygood**
Vice President Business Development,
*IDEO,*
*Palo Alto, California*

*" Imagine an entirely wireless world where broadband is ubiquitous, an endless sea of data engulfs us, objects are alive with intelligence, and the Net is 'always on, always there.' Imagine that nascent technologies evolve to change the form of everyday things - scrolls replace books and magazines, media panels replace computers, holographs replace conference calls, and stick-on patches monitor our health or jogging performance. Welcome to 2010 as envisioned by IDEO…"*

BRUCE NUSSBAUM

*"Welcome to 2010", Business Week, March 6, 2000*

### Company Profile - IDEO

IDEO was formed in 1991 from the merger of David Kelley Design, Moggridge Associates, and Matrix Product Design. From the beginning, the firm has demonstrated a design process that has become a hallmark of IDEO, seriously playful and comfortable with confusion. They have hired extraordinarily diverse professional disciplines, including mechanical and electrical engineers, industrial designers, sociologists, and graphic artists. Today, the company works in multidisciplinary teams which include specialists from fields including human factors, cognitive psychology, business strategy, design planning, industrial design, interaction design, graphic design, architecture, mechanical and electrical engineering, software and manufacturing.

IDEO has created thousands of products for hundreds of clients including, Amtrak, BBC, Hewlett Packard, 3Com and Eli Lilly. Products range from the first mouse for Apple Computers and the sophisticated Palm IV to something as simple as Pepsi's twist 'n go cup.

IDEO has gained national recognition for their work, but interestingly enough it is not only for product design, but for the creative method by which they come up with their products - their process for innovation. IDEO's newest product is themselves - they teach people and companies the art of innovation. Today, IDEO claims that 25% of their revenues are attributable to this function of the business.

## BOX LUNCH 12:00 P.M.

# PASSION DRIVEN GROUPS

**GUESTS:**

**Mr. Daniel Clancy**
Staff Scientist, Computational Sciences Division, Office of the Director of Information Systems, *NASA Ames Research Center, Moffet Field, California*

**Ms. Nancy Dorighi**
Future Flight Central Project Manager, Computational Sciences Division, Office of the Director of Information Systems, *NASA Ames Research Center, Moffett Field, California*

**Dr. William J. Feiereisen Jr.**
Division Chief, Numerical Aerospace Simulation Systems Division (NAS), Office of the Director of Information Systems, *NASA Ames Research Center, Moffett Field, California*

**Dr. Kenneth M. Ford**
Director, *The Institute for Human and Machine Cognition, Pensacola, Florida*

**Ms. Karen L. Gundy-Burlet**
Research Scientist, Computational Sciences Division, Office of the Director of Information Systems, *NASA Ames Research Center, Moffett Field, California*

**Dr. Charles Jorgensen**
Senior Scientist, Computational Sciences Division, Office of the Director of Informations Systems, *NASA Ames Research Center, Moffett Field, California*

**continued next page ...**

What can leaders of global corporations learn from science in dealing with uncertainty and opportunities?

As a NASA Center of Excellence, Ames Research Center (ARC) specializes in research that is focused on creating new knowledge and new technologies. ARC is an organization with many of the challenges and issues faced by the global corporation today. How might their approach to opportunities and challenges provide valuable insights for leaders of global companies?

Challenged to develop new technologies and improve existing ones, how does an organization like ARC encourage creativity? How do the teams at ARC solve seemingly impossible problems? How do they develop their ideas - how do they encourage creativity within the organization?

How do the managers and leaders at ARC keep up to date with the continued growth and change in technology inside their own operation as well as the world around them? How have they changed themselves from the inside to create such a successful organization?

Participants will explore the working environment and engage in discussion with the leaders of four areas of research within the Ames facility to learn about what they are developing, their work environment and discuss how they approach the challenges that face them.

Consider the following during discussions:

- What might be the role of a research and development entity such as ARC in the Internet era?
- What role should private enterprise play in the development of technology versus ARC? What could the relationship be between private enterprise and a government entity such as ARC?

## PASSION DRIVEN GROUPS

**continued from previous page ...**

**Dr. Henry McDonald**
Director,
*NASA Ames Research Center*
*Moffett Field, California*

**Dr. Peter Norvig**
Chief, Computational Sciences Division, Office of the Director of Information Systems,
*NASA Ames Research Center,*
*Moffett Field, California*

**Dr. Steven F. Zornetzer**
Director, Information Systems,
*NASA Ames Research Center,*
*Moffett Field, California*

*" If you deserve the job of leader, then you must listen to those who have ideas."*

HENRY MCDONALD,
*Director, NASA Ames Research Center*

- Are there things ARC is able to do better because it is not a public company? How can their strategies be applied elsewhere or can they?
- What can be learned from the leadership and management styles of the people at ARC that can be applied to large global companies who seek small company "souls" in large company "bodies"?

# NASA AMES RESEARCH CENTER

*" Humans are quintessentially explorers and makers of things. These traits, which identify us as a species and account for our survival, are reflected in the mission and methods of space exploration. NASA's bold missions in space exploration and aeronautics will require advances in many areas of science and technology, but paramount among these enabling technologies is Information Technology."*

*Excerpt from NASA Ames Research Center website, www.arc.nasa.gov*

NASA Ames Research Center was founded December 20, 1939 as an aircraft research laboratory by the National Advisory Committee on Aeronautics (NACA) and in 1958 became part of National Aeronautics and Space Administration (NASA). Ames specializes in research that is geared toward creating new knowledge and new technologies - developing technologies that enable the Information Age, increase our knowledge of aeronautics and space, improve America's competitive position - that fall within NASA's wide range of interests and are in-line with the agency's vision for the future.

Located in Moffett Field, California in the heart of the Silicon Valley, the strategy of Ames Research Center focuses on its unique facilities, human and other resources, location, capabilities and program imperatives. Emphasis is placed on the development and extension of strong collaborative relationships and partnerships with industry, universities, and institutes. The centerpiece of Ames' implementation strategy is to focus on the use of information technology as an enabling and integrating vehicle for the entire Agency.

The following three specific goals address Ames' agency-wide Center of Excellence and mission responsibilities:

- As NASA's Center of Excellence for Information Technology, Ames provides Agency research leadership and world-class capability encompassing the fields of supercomputing and networking, high-assurance software development, verification and validation, automated reasoning, planning and scheduling, and human factors.
- As NASA's lead center in aeronautics for Aviation Operations Systems, Ames champions research efforts in air traffic control and human factors. Ames also leads the Agency's research efforts in rotorcraft and tiltrotor technologies which offer aircraft options to current short-haul civilian aircraft. Ames also has major responsibility for the creation of design and development process tools and simulation.
- As NASA's lead center for the emerging science area of astrobiology (the search for evidence simple life forms that may exist or have existed in the past on other planets), Ames is responsible for science leadership, program coordination, the conduct of science research, and integration at the working level. Ames develops science and technology requirements for current and future flight missions that are relevant to astrobiology, including advanced concepts and technology development. This Center identifies and develops astrobiology mission opportunities, life sciences experiments for space flight, and space science research components of astrobiology. Ames also leads in information technology applications, and astrobiology education and outreach programs that inform and inspire the American public.

In addition to these assigned leadership responsibilities, Ames is leading NASA in the planning and early-stage execution of such important areas as nanotechnology, design methodologies that maximize safety of manned platforms, and life science research to understand the evolutionary processes that occur in simple life forms as they are taken from Earth to prolonged weightlessness on the International Space Station.

# NASA AMES RESEARCH CENTER: DISCUSSIONS AND OBSERVATIONS

**LEADER:**

**Mr. Michael O. Alexander**
Chairman,
*The International Forum*

**GUESTS:**

**Dr. Kenneth M. Ford**
Director,
*The Institute for Human and Machine Cognition,*
*Pensacola, Florida*

**Dr. Henry McDonald**
Director,
*NASA Ames Research Center,*
*Moffett Field, California*

**Dr. Peter Norvig**
Chief, Computational Sciences Division, Office of the Director of Informational Systems,
*NASA Ames Research Center,*
*Moffett Field, California*

**Dr. Steven F. Zornetzer**
Director, Information Systems,
*NASA Ames Research Center,*
*Moffett Field, California*

Participants discuss their questions and observations of the NASA - Ames Research Center experience with the leadership and management.

# MYSTERIES OF THE SILICON VALLEY - PART II OBSERVATIONS AND CONCLUSIONS

**LEADER:**

**Ms. Nancy A. Doyal**
President,
*The International Forum*

Participants share their observations from the days site visits to the companies of Silicon Valley and consider the following questions:

- How do these companies deal with change and opportunities?
- What kind of people lead and work in these organizations? How are they different than the ones in your organization?
- Why do people want to be creative? What are the forces that enable this to happen? What are the constraints?

## MEI LONG RESTAURANT

When Grace Zhou and master chef Renyi Liu opened the Mei Long restaurant in Mountain View in 1995, they brought a little piece of Chinese culinary paradise with them from Shanghai to the Silicon Valley. Grace manages the restaurant and her husband, trained at the famous Mei Long Zhen restaurant in Shanghai, is the chef. Together they reinvented an ancient culinary tradition to create an elegant little restaurant that couples fine California wine with exquisitely prepared traditional Shanghainese dishes. The Liu's and their fine restaurant are a recent expression of the immense Chinese contribution to life in California.

The Chinese connection with California is a long and deep one. Since 1847, when a Cantonese merchant named Chung Ming spread word of the a gold strike among his compatriots in 1847, Chinese immigrants have flocked to California seeking to share in the prosperity of a place they nicknamed the "Golden Mountain." Fleeing floods and famines under the collapsed Manchu rule at the end of the First Opium War, Chinese sought a better life across the sea, setting off on a risky and sometimes fatal 62-day voyage across the Pacific Ocean to San Francisco, and hopefully to a better life.

By 1852, over 25,000 Chinese were living in the new State of California. Organized by a group of Chinese immigrant entrepreneurs, they were quickly employed in the gold mines, where their hard work and long hours earned them the contempt of envious Caucasian miners who soon lobbied for a Foreign Miner's License Tax to put them out of business. Increasing hostility forced them to quit the mines and settle on Kearny Street, the only place they were allowed to rent rooms in "Little Canton"- now known as Chinatown. They survived by doing laundry for an all-male population of rough and tumble miners and sailors, a venture at which they again prospered. They also planted most of the miles of grape vineyards that feed the booming California wine industry today.

When the transcontinental railroad was being built in the latter half of the 19th century, Caucasian workers organized and walked off the difficult job to work the Comstock silver mines. This left Charles Crocker, one of Nob Hill's "Big Four" financier's, in search of workers to complete the monumental task. He hired Chinese

workers, who did not argue with the opportunity. Working long and hard, they completed the transcontinental railroad in 1869. No Chinese were included, however, in the commemorative photograph when the last spike was driven, linking the East Coast with the West. Hostilities over increasing Chinese prosperity resulted in the Chinese exclusion act, that forbid immigrants from entering the US between 1879 and 1949.

Nonetheless, the Chinese community in San Francisco flourishes today as an independent and self-sufficient community that polices and educates itself. There are no homeless people in Chinatown; everyone is taken care of by others in the community.

Since the boom in the high-tech industry in Silicon Valley another influx of Chinese has occurred, this time to take part in the boom in the Internet industries. Grace Zhou is a part of this new wave from China. She works as a silicon chip designer by day in Silicon Valley - by night she "graces" the dining room of Mei Long, offering her husband's creative cuisine, which critics have praised as "impeccably fresh food, style and service."

Mei Long's culinary contribution to present day life in Silicon Valley adds another chapter to the continuing Chinese saga in this land of the "Golden Mountain."

# REINVENTING THE COMPANY - PART I

*CoolTown - Hewlett Packard Corporation*

**LEADER:**

**Ms. Nancy A. Doyal**
President,
*The International Forum*

**GUEST:**

**Mr. Doug McGowan**
General Manager, e-Services Solutions,
*Hewlett Packard Company, Palo Alto, California*

*"Welcome to CoolTown, where (in the not too distant future) people, places, and things are first class citizens of the Web; a place infused with the energy of the online world; a place where web-based appliances and e-services give you what you need when and where you need it for work, play, life. Interweaving the web with the context of people, places and things in the physical world will have deep implications for global and local business, institutions and individuals."*

*"Welcome to CoolTown", www.cooltown.hp.com*

CoolTown began as a research project of the Internet & Mobile Systems Lab of Hewlett Packard Laboratories. It is a core set of application software and standards, and a community of developers and partners aimed at creating information appliances, software and services for the coming world of diverse, pervasive networked computing, using the World Wide Web as the underlying framework of a fundamentally open solution. Researchers at CoolTown argue that by shunning specialized or proprietary techniques, CoolTown demonstrates a way to easily link personal computers, hand-held devices and other information appliances in cars, homes and offices, using technology that is already widely accepted.

HP has made available CoolTown architecture and technologies for free on their website in order to encourage a community of interest in their vision and products. Their research model for this project is one that is open to collaboration and partnership with those who share similar goals. The vision for CoolTown includes scenarios for businesses, customer service, education, personalization, responsiveness and safety that can be reviewed in Palo Alto or on their website.

Participants view CoolTown's vision of the future and envision a future of their own. How do the scenarios exhibited by CoolTown fit into your lifestyle - are you already applying the technologies they showcase at work or at home?

How might these scenarios illustrate how the lives and work of your employees, customers and suppliers will change? What opportunities are there for your organization to reinvent what it does and how it does it?

**In small groups participants will discuss and address such questions as:**

- What pattern changes do you see emerging from your experiences and what you have encountered in the past few days?
- How does this change what opportunities that you see for your business?
- What would you describe as real "reinvention" now versus simply "incremental" enhancements or ideas using technology to enhance old patterns? How might you go about accomplishing this?

The CoolTown research program in appliance computing is based on five underlying beliefs about the future:

1**. Rampant diversity of mobile and embedded information products, wireless and wired communication networks, and rich media content will be the norm, fueling an explosion of novel and sophisticated services to feed user and business demand for everything Net.** This is often referred to as the vision of pervasive, ubiquitous or anytime, anywhere computing, but by themselves these terms say relatively little about the services and benefits that might be delivered to actual people. Achieving this vision depends on the use of open, widely available standards, such as those embodied by the web.

2. **The future network environment is the web.** In contrast to tightly held proprietary platforms, the web is an open, extensible, heterogeneous, standards-based network infrastructure for delivery of services. More importantly, web protocols and conventions are already understood by almost every network, computer and software developer on the planet. These key characteristics of openness and widespread acceptance will continue to be the basis for a thriving global marketplace of ideas, products and services.

3. **Everything has a web presence.** People, places, and things in the physical world will have increasingly complex online representations, allowing them to participate in web services. They will become first-class citizens of the web. This will enable services to become more personalized, more spontaneous, and more responsive to the wide variety of contexts in which people live their lives.

4. **Bridging the physical and online worlds will bring the benefits of web services to the bricks-and-mortar world where people still live most of their lives.** In turn, online environments will be enriched by access to physical places and devices, and to people that don't sit quietly at their desks. As the physical and online worlds come closer to each other, customer relationship management and deep personalization will become a reality.

5. **Connected ecosystems of service providers will link together in creative and productive ways.** A new paradigm will emerge as diverse services are woven effortlessly together, changing how and from whom customers receive products, emergency help, education, automotive care, and more.

# REINVENTING THE COMPANY - PART II

**LEADER:**

**Mr. Michael O. Alexander**
Chairman,
*The International Forum*

**GUEST:**

**Ms. Ann Livermore**
President, Enterprise and
Commercial Business,
*Hewlett Packard Company,*
*Palo Alto, California*

In recent years Hewlett Packard has set about its own process of reinvention. A series of strategic and operational moves including the spinning off of its original instruments business and the appointment of a new CEO - provided the momentum to take on some key challenges and opportunities. Hewlett Packard re-set itself to return to the customer, taking their cue from what their customers needed in order to be successful in an increasingly complex and changing environment.

As a key part of their plans, Hewlett Packard has embraced the Internet to the core of their strategy. A basic assumption is that the Internet is and will be "always on" and thus the future of the company requires them to consider first, how they will operate in this environment, learn from their own experience and in turn work with their customers at creating a future that neither of them may fully understand yet. It is a bold undertaking, which requires a high degree of commitment, energy and leadership.

- What has Hewlett Packard learned from this experience?
- How has it changed the way that they serve their customers?
- How has the organization changed to meet the challenge? What kinds of employees appear to be successful in this type of environment?
- What have been some of the biggest surprises to them as they have undertaken the process of reinvention?
- What kind of leadership is critical for this to be successful?

# DELANCEY STREET

**LEADER:**

**Mr. Michael O. Alexander**
Chairman,
*The International Forum*

**GUEST:**

**Dr. Mimi Silbert**
Director,
*Delancey Street Foundation,*
*San Francisco, California*

Delancey Street is home to five hundred "residents" who have been found guilty of serious crimes, were once drug addicts, or homeless people. Founded in 1971 by Mimi Silbert, it is based on the premise that to gain self-esteem and make a meaningful contribution to society you must give. To be able to do, you have to learn, and, as you learn, teach others. When residents first arrive at Delancey Street they live in rooms with 6 others. The other residents teach them. Gradually they take on jobs like sweeping and washing, graduating to table setting, fixing cars, cooking, sewing, painting and carpentry - all taught to them by the others who live there. There is a curious organization structure. Depending on your talents you will make your way up the hierarchy in three different parts of the organization: the Vatican Room (focused on the emotional wellbeing of residents); the War Room (focused on the finances): the State Room (focused on the general operations and bureaucracy for running the place). Depending on your strengths, you may be at the top of the hierarchy in one part of the organization and at the bottom in another. Delancey Street is not a business, yet it operates over a dozen businesses including the second largest moving company in California, a popular restaurant and catering service, an event planning company, a special events decorating company, an automotive service center, a printing company, and a Christmas tree sales venture that earned $1 million last year. The entire organization is run by its residents.

As an entrepreneurial enterprise how does this compare with Silicon Valley?

During its 30 years in operation Delancey Street has taken no government handouts; it has managed without a fleet of therapists and it has not had a single arrest or violent incident. The center itself was built by the residents and was required to become its own licensed contractor. Since 1971 over 11,000 ex-convicts, homeless people and drug addicts have passed through Delancey Street, successfully graduating to lead normal lives in communities.

Today, more than 1,000 residents live and work in five facilities in the USA; San Francisco, Los Angeles, San Juan Pueblo, New Mexico; Brewster, New York; and Greensboro, North Carolina. According to Mimi Silbert, "the Delancey Street principle is that ordinary people can transform extraordinary dreams into reality by

## DELANCEY STREET

pooling their resources, supporting one another, and living lives of purpose and integrity. It doesn't take an enormous amount of money to make change possible. It takes a sense of values and a vision - and people believing in one another."

Participants of the Forum will visit Delancey Street, meet the residents and, in discussions, learn about them and this self-sustaining enterprise. In these discussions there are two general questions that might be considered.

- What is it about the leadership and management style, the organization structure, creativity and the approach to developing people that has made this enterprise so successful? What can be learned that would be effective in your own organization or others in which you are involved?
- What other problems facing society today could be addressed using an approach similar to Delancey Street? How would you go about replicating Delancey Street and its self-sustaining enterprise towards addressing these problems?

Future address of the Delancey Street website - a work in progress: www.delanceystreet.net

SESSION 17 1:30 P.M.

## GROUP DISCUSSIONS

*Delancey Street*

# ASIA'S NEW ECONOMY

**LEADER:**

**Dr. Kenneth DeWoskin**
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**GUESTS:**

**Mr. Paul Su**
Director of Asia Business Development,
*Cisco Systems Inc., San Jose, California*

**Dr. Yip Yan Wong**
Chairman,
*The Wywy Group, Singapore*

**Mr. Robert Yung**
Founder and Chief Executive Officer,
*One Studio, Hong Kong*

Asia is of particular interest in the development of new economies for several reasons. First and foremost are the population base and the overall rate of economic growth. These factors alone assure that a large fraction of every multi-national company global market share will be in Asia. Moreover, for many telecommunications facilities companies this is already true, given the astronomical growth of Information, Communication, Telecommunications (ICT) related infrastructure investment in countries like China. And Asian countries have shown a growing awareness of the need to transform from factor-based economies to knowledge based economies. Aspirations to become a major information service hub have been voiced by Kuala Lumpur, Singapore, Hong Kong, Shanghai, and Beijing, even as every major city in Japan experiences strong growth in ICT industries. Finally, the relatively recent modernization of most Asian economies means that may have relatively little obsolete infrastructure to deal with, and their build-outs of data carriage infrastructure and service from the last half of the last decade forward are being done with new technology that supports New Economy usage and growth.

Important examples of industry leadership at a global level have also emerged in Asia. Japan is the model of the world for wireless broadband, the exciting success of DoCoMo having paved the way for commercially viable converged wireless services. DoCoMo plans to deploy 3G technology this year, again pacing other advanced countries. Over in China, growth rates in cellular ownership reached 97% in 2000, with nearly 45 million cellular users added, making China an economy where local access is being transformed with new technologies. Hong Kong has expressed its leadership ambitions with a commitment to its CyberPort, and CyberPort entrepreneur Richard Li has capitalized on the Li family business record to fuel the growth and ambitions of his Pacific Century CyberWorks. Li thinks in terms of global dominance for his Internet businesses, not regional dominance.

And yet, by many measures, the development of e-commerce in Asia is uncertain. In Asia's two largest economies, China and Japan, deeply-rooted cultural characteristics in the economies shape both the promise and the problems of e-commerce development. In both countries, distribution systems are inefficient, their development being constrained by traditions of intermediaries,

many rent-collectors, who add little value but add cost to the distribution of goods and services. As technologies and prospects of new, dis-intermediated systems of distribution intrude on these economies, the established, relationship-based channels offer a formidable source of resistance. In some cases, this is corrupt; in others it is not. In all cases, established interests appear to impede a pace of regulatory reforms that would be commensurate with what technology can deliver and what consumers say they want. And in all cases they slow the adoption of the kind of new architectures for supply chains such as those that have led the growth of e-commerce in North America and Western Europe.

On the other hand, partly because of the inefficiency of established supply chain relationships, certain tried and true alternatives to the standard model have been successful. Most Asian countries have proven to be fertile grounds for the growth of direct selling systems, including the multilevel systems of the Amways and Avons. So powerful was the expansion of such systems in China, that the government closed them down, with a broad prohibition against retailing systems that were not based on a network of physical retail establishments. The initial success of direct selling models augers well for Internet enabled B2C and B2B businesses. The reaction of government regulators, ranging from cautious to negative, does not.

In the rapid development of pure e-commerce companies in the West, growth depended on a process of adaptation of existing soft and hard infrastructure. On the hard side, in areas like logistics, the delivery models of direct selling companies were expanded to support the red-hot growth in fulfillment demands that on-line retailers created. On the soft side, things like the security of contract agreement was replicated on the web with systems of authentication, certification, public key management, and other on-line and off-line processes that prevented repudiation of on-line agreements and protected confidential information. An important stage in this process unfolded throughout the 1980's, as industry groups, both national and multinational, gained greater influence over standards and protocols of data transmissions and exchange, at the expense of government security agencies. This adaptation of non e-commerce apparatus to e-commerce generally secured the trust necessary to complete business deals in B2C and B2B space of

any size in the foreshortened timeframe of e-commerce transactions. Transaction tools tailored to the Internet can support trades of a single dollar on e-Bay or tens of millions on EnronOnline.

But what are the prospects in Asia of a similar transformation of the marketplace? If one looks at hard and soft infrastructure, the prospects are mixed. In economies across east and southeast Asia, the foundations of trust remain more relational and less institutional than in the west. This will make it more difficult to depersonalize economic transactions in both B2C and B2B worlds. In many Asian countries, contracts are more often implicit than explicit, and the courts play a very minor role in interpreting, adjudicating, and remedying commercial relationships and disputes. At the very heart of e-commerce is the ability to create an immediate relationship of trust with someone you previously did not know and will most likely never meet face to face. Asian 'face' cultures may not adapt readily to this world. And in most Asian countries, most especially China, there are problems forming industry associations independent of the government, and there are no serious avenues for business interests to litigate or otherwise test regulatory pronouncements that are unfair or harmful to their interests.

Just in the area of contract compliance, the mixed experiences that foreign investors have experienced with arbitration and judicial proceedings in China are not comforting precedents for large on-line transactions. Similarly, consumer laws that are either weak themselves or weakly enforced have retarded the development of consumer confidence in direct mail and electronic commerce. The banking system has lumbered slowly on the road to developing settlement mechanisms for on-line transactions, even though the technical know-how and interest are there. Lacking is a commitment to and understanding of the necessity for individual banks to surrender some resources and revenues to a harmonized, central clearing authority. Finally, the non-convertibility of the currency in China, still the most attractive Asian marketplace for international business, prevents most consumers from participating in international shopping sites that they can surf over but not really shop in.

Physical infrastructure is another potential constraint. In most of Asia, prior to the early 1990's, there had been little commercial

development of logistics companies that are independent like FedEx and UPS nor market-leaning delivery monopolies like Deutsche Poste or USPS. If we look at China, we find a fragmented universe of local, low tech delivery companies, some embryonic contenders in the form of international joint ventures, and one relatively commercial off-shoot of the China Post delivery monopoly, China's EMS. None would appear to be an obvious candidate for a high speed, high tech, high efficiency delivery system to support the extreme fulfillment demands of rapidly growing B2C channels like Amazon or P2P/B2C channels like e-Bay. Again in China, because distribution and retailing have been completely or substantially off-limits to world class players, much of the technology that is needed to support a viable physical logistics system is not yet evident.

Finally, there are echoes of the Asian financial crisis and on-going uncertainty about Japan's economic future, which still significantly moderate investor enthusiasm for investment across Asia. Add to this the global chill toward dot.com investment, and we get carnage in the Asian dot.com marketplace. Even the official cheerleaders of China's Internet investment marketing program acknowledge that growth is slowing. "China's buzzing Internet industry calmed down in the latter half of 2000 as more dot.com companies began rational business operations, leaving behind the unrealistic optimism of the start of the year, said a report from the research house of the Ministry of Information Industry (MII)," *China Daily* reports. The report continues to say that the number of B2C sites shrank from 627 at the beginning of 2000 to only 205 at the end.

Against these challenges, though, there is huge promise in Asia's New Economy. Most countries are undertaking an accelerated liberalization of underlying infrastructure and dismantling incumbent telecommunications monopolies. A very high level of investment is being sustained in the physical infrastructure that can support a rapidly growing on-line population, and access, coverage, variety, and quality of information and communications services are rapidly improving. In all major markets substantial regulatory reform is opening groups of services to new competitors and to market forces, prompting planners and entrepreneurs to wire the landscapes with fiber and exchanges. Consumers have shown at least as much interest in the tools and gadgetry of the Internet, wireless broadband, DSL, and cable broadband as consumers anywhere else in the world.

Perhaps most importantly, human capital is being continuously improved, with technical institutions training better and better programmers and engineers. China is beginning to think of itself as a competitor to India in programming and applications design, and leading New Economy players in China, like Huawei, are setting up shop in India to gain more regional footholds, and, indeed, more footholds in the English-speaking world. At the same time education-conscious Asian families are focused on the threat of a digital divide, and at all levels of society where they can reasonably afford it, access to computers and computer literacy are a priority that parents and students and their governments seem to agree on.

- How will local tastes, buying habits, values and expectations manifest themselves in the use of the Internet across the different cultures of Asia?
- In developing a global strategy for the future what are the important considerations a company must make as it determines what its Internet applications, processes and products will be in different local markets around the world? How will the deployment of their Internet enabled businesses be different in Japan than say China, Korea or parts of Southeast Asia?

# ALWAYS ON - A MARKET ON THE MOVE

**LEADER:**

**Mr. John H. Abrahamson**
Chairman,
*Sörmland Skåne Handels AB,*
*Stockholm, Sweden*

**GUESTS:**

**Mr. Gustave V. Barreda**
Senior Corporate Director,
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**Mr Göran Rassmuson**
Director, Corporate Marketing and Business Development,
*Telefon AB LM Ericsson,*
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**Mr. Robert Yung**
Founder and Chief Executive Officer,
*One Studio,*
*Hong Kong*

The convergence of mobile telephony and the Internet has created the Mobile Internet, a worldwide, rapidly growing market.

The Internet is changing the world, our behaviour and the way we do business. Perhaps the really notable changes will come with the Mobile Internet. There are fewer areas where the consequences for our ordinary lives will be as significant as the developments in the area of wireless techniques and the wireless Internet. The Mobile Internet will be "the web applied to life".

The debate is full of hype and the technology is not all that understandable to most of us. What is very important to remember at this point is that although the wireless Internet cannot be characterised as user-friendly now, once it becomes so, it will be an integral part of our lives. Mobility will play a major role in making the Internet user friendly.

The Mobile Internet is expected to be much bigger than fixed Internet. The penetration of mobile phones and other handheld devices is and will be much higher than the penetration of PC's. The number of users of mobile phones globally will pass 1 billion within the next couple of years. In less than five years there will be more mobile Internet subscribers than for the fixed Internet (source: Ericsson). In contrast to the stationary PC, the mobile terminal will allow constant access to the Internet without the inconvenience of being tied down to a stationary device. Users of traditional Internet services and corporate networks will increasingly expect access to similar services while away from the desk. We seem to have a constantly increasing demand for real-time information - privately and in business.

The Mobile Internet is easier to develop than the fixed Internet. There are large differences, structural and regulatory. For Mobile Internet there is an existing customer base with a billing relationship. There are large sunk costs in terms of network, brands and building customer loyalty. There are a limited number of operators in each market, so access to the end customer is less dynamic than with fixed Internet which is entirely open.

The most developed example of the Mobile Internet today is I-mode in Japan (www.nttdocomo.com), with 20 million users. While being a very simple service it is a good example of how

quickly it can develop. I-mode will come to Europe in Q3 2001. To the US?

If we forget the technology for a moment and focus on how the Mobile Internet can and will be used, now and in the future, then we may be able to remove the mystery. The functionality of the Mobile Internet can be divided into two parts:

- Consumers and private individual use. Functionalities that may be necessities such as shopping, but will just as often be extras in life, such as entertainment.
- Industrial use. Ways to increase productivity in business and other organisations and to make possible things that at present are not possible.

Some examples for each might include:

**Lowest price**

You enter a traditional high street record store where you look at a CD. With your handheld device (mobile phone), which has a bar code reader, you read the price of the CD into your terminal. It automatically goes into a price comparison service on the web, such as Pricerunner.com or ZOOM.com, and compares the price. It knows where you are through the MPS (Mobile Positioning system) so it compares with what is available both on the Internet and in other nearby stores (to the extent they have decided to provide information). You are informed instantly that the cheapest place to buy this record is via a net service, at $16.45 incl. home delivery. You place the order just by pressing OK. Your ID is already in the terminal and you will pay via your monthly phone bill.

*Source: Enskilda Securities (www.enskilda.se)*

**Autoroute du Sud, 2002**

It´s 8:30 in the morning in early summer and the road ahead looks empty. A few trucks rumble by, but the old days of their blocking toll booths are passed, as their in-built mobile phones send a Bluetooth message to the toll collector as they pass at 90 kph. The driver of the station wagon has a few moments of peace, as the children eat their croissant and her partner scans the financial pages on his mobile for news on US trades during the night-time crossing hours from Ireland. Once the children start to stir and the tapes have run out, they can listen to story clips and play games on their terminals, which had been downloaded during cheap time the night before. The co-pilot, having ended his stock-hunting and taken some profits by confirming three trades, relaxes in the knowledge that the holiday might have been expensive but that a few quick moves last week in German mobile web mediation software stocks have covered this.

Then the car control system beeps, warning of road news ahead. The Tour de France will be passing across the Burgundy countryside, with long delays, although the A6 autoroute will not be affected. The driver grimaces. So much for the quiet first night in a glorious chateau in wine country, with the world's press and cyclists flooding the place. She activates the voice-mode browser and asks the system to switch routes through the Auvergne and seek alternative accommodation. It responds with reviews of three hotels and voice-clips of past visitors. One appeals and she re-books; the system cancels the previous booking without charge by signing another wait-listed user to it.

The system then plots a route, timings and suggests a lunch stopover. It finishes up with the news that "the cost of the search and the call is EUR 8 but that payment for the hotel using the phone will entitle a free bottle of champagne, which can be put on ice now". She voice-clicks OK. The phone transacts the transfer and informs her that the item will be included on the Allied Euro Bank account at her local operator, Irecell.

*Source: Enskilda Securities (www.enskilda.se)*

**Where did all driving, all the paper, all the errors (and all the staff) go?**

Björn stops his service van outside the office complex in Stockholm where his firm has a number of customers. In the morning he had turned on his handheld terminal to see where he was scheduled to go today. He walks to the first soda machine and read its ID with the bar code reader of his handheld terminal. He then stores it full with sodas, reading the type and quantity of what he puts in with the bar code reader from each case. When he has finished he once again reads the bar code of the machine which then also registers the time as it did when he arrived. Then he moves on to the next one.

Later in the day his terminal signals that he is running out of certain items in the van. It tells him which is the closest storage to go to for refillment, after having checked that the items he, according to the system, needs are available there. He stores the van and proceeds. In the end of the day he goes straight home to his family.

All refillments have been registered in his company's business systems, invoicing system and inventory system. Information has also gone to the Customer Relationship System and to the Machine Service System.

While he drives home he remembers the old days. When he filled in forms for each machine he filled, itemising every soda. Three copies. When he went to the office every day, sometime several times a day, to hand in the forms, to receive new orders and to manually check what he had in store in the van. He remembered all the staff that had been registering all the forms into the business systems. He remembered all calls that came in from customers who complained about empty machines. He remembered machines that broke down because they had not been serviced when it was needed. He remembered that the inventory never matched what the business system claimed should be in there. And he remembered that he had then only had time to do 15 calls a day. Now he easily did 25.

Only the imagination sets limits for how wireless techniques and the Mobile Internet can be used.

Today, in March 2001, technology limits the functionality of the Mobile Internet severely, but this will improve significantly over the next few years.

Present second generation networks, like GSM (with 10 kbps capacity), can technically handle quite a lot of functionality today (particularly for business such as improvements in operations for the mobile work force) but still has large limitations. The 2.5G technology and package switching - GPRS (with 115 kbps capacity) is improving this already now. Always-on capacity will give users constant access without tedious modem log-on procedures. Billing will no longer be by the time you are on line, but by the content. EDGE (384 kbps) and later UMTS (with up to 2 mbps capacity) will enable us to do most of the things we can dream up now. UMTS (Universal Mobile Telephone System) is the third generation - 3G - of mobile systems and will be the first global standard.

New handheld devices, not only mobile phones but also other hand held devices such as Palm and hand PC's, and their operating systems (presently Palm, WindowsCE/PocketPC, EPOC) will improve functionality in the very near future. By the end of 2001 close to 50% of the total amount of phones used are expected to be data enabled, in 2005 almost all. Mobile phones and PDAs (Personal Digital Assistants) will converge creating a variety of different types of hand held terminals.

A large number of other technological developments will increase functionality dramatically.

Bluetooth (short range wireless communication standard of up to 10 meters - www.bluetooth.com) will be in a central position when the mobile terminal is transformed to your e-wallet, supporting m-commerce such as paying for parking meters, bus tickets, shopping, movies and so on. Bluetooth together with WLAN (Wireless Local Area Networks) will enable for example smart offices in which an employee with a Bluetooth device is automatically checked in when entering the building and this triggers a series of actions such as lights and PCs being switched on.

PKI (Public Key Infrastructure) will ensure confidentiality, integrity, authentication and non-repudiation in e-communication. New laws

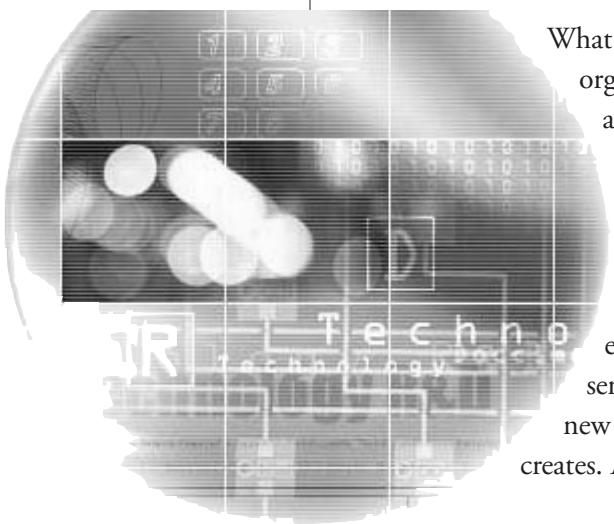
in Europe make e-documents and e-signatures as legally binding as physical documents and signatures as long as certain PKI standards are followed. This means that for example all tax, VAT and customs returns can be handled entirely electronically.

The human voice is the most natural interface, particularly for hand-held devices, and speech technology - for example voice recognition and real time translation will not only facilitate existing applications but will also enable new functionality. Voice-driven browsers will make mobile Internet devices such as mobile phones significantly more user friendly.

MPS (Mobile Positioning system) enables systems to know where you are which adds a lot of new possibilities. However, and maybe luckily, laws prevent for example local stores from sending commercials to those in the neighbourhood who have not asked for it.

WAP (Wireless Application Protocol) is a set of specifications that describes how portable wireless such as phones and PDA's should access the Internet and communicate with each other. It is the first credible attempt to create standards for net access by these devices and using WAP anyone should be able to access the web from a simple phone-like device. One of WAP's immediate drawbacks is the cost of developing genuinely useful services. But in time personal banking, timetables, cinema and restaurant booking services are all within WAP's reach.

All these technical developments will in short mean that user-friendliness will increase dramatically during the years to come!




What might the future look like and how is your organisation considering this in its strategic and investment decisions?

The mobile device will evolve over time to become a personal remote control - for information, communication, transactions, entertainment and research. This may take e-commerce to new dimensions and to serious volumes. It will increasingly create new services because of the networking effect it creates. And it will inevitably cannibalise on many

existing businesses. More and more everyday tasks are migrated to your handheld device; wallet, keys, credit cards, etc.

Global scope, local application - the M-web will integrate with people and companies' daily activities and processes and will have a high value in applying them actively, not passively behind a screen.

The installed base of business systems is perhaps the best example of existing enterprise infrastructure that will benefit from being extended to the Mobile Internet. This may have the largest potential for productivity increases, allowing rationalisation of business processes and increase personal efficiency. Paper may actually in the end more or less disappear as working documents (such as forms, lists, etc.), time will be saved, quality increased and more processes will become automated. Supplying workers with a mobile, direct interface to the enterprise business systems anywhere and anytime will add a lot of value to many businesses.

Techniques for mobile video transmission and data compression - MP3 - make some expect that there will be no difference between the services available in a fixed or a mobile environment. In the end, the fixed Internet may be left for critical business-to-business functions and the like.

However, there are challenges. With all the different handheld devices, different protocols and standards and different networks being developed, can the software run on all of these or will it only be useful on some and not others or useless after a while. This may present a problem not only for the buyer, consumers or corporations, but also for manufacturers. Billing and revenue models are far from clear or standardised among the operators. The confusion created by different techniques and the lack of compatibility could delay the deployment of the Mobile Internet. The question is for how long.

How do you see the Mobile Internet affecting your business. What are the opportunities? What are the challenges?

Consider the following:

- The Mobile Internet will save cost and increase efficiency in your business. What will you or your customers NOT be doing in the future?

## ALWAYS ON - A MARKET ON THE MOVE

- How will the M-Web mean new opportunities for your business?
- In which way could the Mobile Internet be a threat to your business?
- What in our daily life could change significantly in the future because of the M-Web?
- What will we not be doing in the future that is a natural part of our everyday life today?

Suggested Links for further information, background and news on mobile Internet and wireless communications:

www.mformobile.com

www.wow-com.com

www.unstrung.com

# COMMUNICATING WHAT HAVE WE LEARNED THROUGH THE ARTS

*Z Space Studio and Avelino Associates*

**LEADER:**

**Ms. Diane Durston,**
Director, Special Programs,
*The International Forum*

**GUESTS:**

**Mr. David Dower**
Founder and Artistic Director,
*The Z Space Studio,*
*San Francisco, California*

**Mr. Michael Palladino**
Founder,
*Avelino Associates, Inc.,*
*San Francisco, California*

The Internet's hold on the city of San Francisco is most evident in the enormous change that has occurred in the area South of Market - SoMa, as it is known locally - where tech firms have bought up leases on lofts, apartment buildings and warehouse spaces in this rundown industrial neighborhood that were formerly home to artists, actors and other low-income residents. The turf war between the two groups has become a major civic issue in San Francisco, with citizens divided between those who like the new look of this once neglected district and the retirees, low-income families and artists who now struggle to pay the rising rents and keep their homes and studios.

An entrepreneur and an artist have teamed up to re-think this scenario and find new solutions to a problem many American cities now face. Michael Palladino of Avelino Associates Inc. and David Dower of The Z Space Studio, have combined business and art in a shared 10,000 square foot facility in the SoMa district.

Avelino is a consulting and systems integration firm working in higher education and healthcare. Since 1985, Avelino has hired and trained actors, directors, writers, and visual artists to provide technical services and training to its clients around the country. Z Space is a nationally recognized theater development enterprise that applies emerging business and revenue-generation models to its artistic goals. Together, the two organizations create an environment that encourages both analysis and creativity. They share a common goal: a healthy, sustainable community that recognizes and encourages all aspects of a person's life.

Participants visit Avelino Associates and Z Space to meet the artists and work with them to create living expressions of the lessons learned throughout the Internet Forum, using an artist's tools for problem solving and creative analysis.

- What can be learned from the way artists see change in the world? What different perspectives are they likely to have on the issues that business leaders confront?
- What do artists consider when they communicate important messages about what they observe?
- How can we utilize the ideas, perspectives and skills of artists to make the communication of important messages in business more effective and enjoyable?

## YOGA AND AIR TRAVEL: HOW TO RECOVER FROM JET LAG

*Garden Room,*
*The Fairmont San Francisco*

**LEADER:**

**Dr. Joshua Feinbloom**
Clinical Psychologist;
Head of the Yoga and Movement Workshop,
*The Mindful Body,*
*San Francisco, California*

Scientists at NASA continue to study the impact of long-distance air travel on the human body and mind, both for its implications to the space program and for its applications to the lives of those whose work requires almost constant and often extended air travel. There are therapists who concentrate specifically on methods for relieving the effects of jet lag - aching limbs, lack of sleep, and general fatigue.

The third day of this three-day session on Yoga emphasizes techniques for recovering from jet lag through simple practices that can be done in the privacy of one's hotel room.

## DINNER 7:30 P.M.

*mc≈ restaurant*

# STAKEHOLDERS IN THE NEW ECONOMY

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*Chicago, Illinois*

**Ms. Donna McDonald**
Consultant, *Silicon Valley Strategic Group,*
Former Vice President,
E-commerce,
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As today's business leaders realize how critical value alignment is for the survival of organizations in the New Economy, they are often faced with a daunting challenge. Merely promoting the organization's mission and values through the traditional chain of command does not go far enough. In a world where transparency and empowered communities are rapidly replacing "corporate castle walls" and traditional "command and control" management models, today's organization must identify and embrace stakeholders that extend well beyond traditional investors, the supply chain and end customers. This new, broadly expanded group could be called the stakeholder community.

- What new stakeholders are emerging and how are companies preparing to deal with them?

Each segment of this broad stakeholder community requires a different lens that delivers the organization's "personal meaning." An organization's vision, mission and values should be capable of being internalized by each segment, in their own language, accounting for their personal relationship with the organization and other stakeholders. The retooling of an organization's "corporate soul" for each stakeholder segment requires translation - not interpretation - that in turn builds empowerment, goodwill and trust between the organization and its broad stakeholders.

- How are the requirements of customers, employees, shareholders and the community changing with respect to the global company?
- How will groups of stakeholder (such as special interests, customer groups, employees) use the Internet to support their on-going efforts to spread their messages, secure resources and bring about change that will affect your corporation?
- How are corporations preparing to deal with this change in relationships brought about by the Internet?
- In an environment where knowledge is a prized asset, what will become of the relative importance of the "knowledge worker" or employee versus the shareholder? Could we conceive of a model where shareholder capitalism is replaced or modified by some version where knowledge workers in a corporation choose whom their owners will be?

# THE FUTURE OF THE INTERNET

" The Internet, although a network in name and geography, is a creature of the computer, not the traditional network of the telephone or television industry. It will, indeed it must, continue to change and evolve at the speed of the computer industry if it is to remain relevant. It is now changing to provide such new services as real time transport, in order to support, for example, audio and video streams. The availability of pervasive networking (i.e., the Internet) along with powerful affordable computing and communications in portable form (i.e., laptop computers, two-way pagers, PDAs, cellular phones), is making possible a new paradigm of nomadic computing and communications.

This evolution will bring us new applications - Internet telephone and, slightly further out, Internet television. It is evolving to permit more sophisticated forms of pricing and cost recovery, a perhaps, painful requirement in this commercial world. It is changing to accommodate yet another generation of underlying network technologies with different characteristics and requirements, from broadband residential access to satellites. New modes of access and new forms of service will spawn new applications, which in turn will drive further evolution of the net itself.

The most pressing question for the future of the Internet is not how the technology will change, but how the process of change and evolution itself will be managed. As this paper describes, the architecture of the Internet has always been driven by a core group of designers, but the form of that group has changed as the number of interested parties has grown. With the success of the Internet has come a proliferation of stakeholders - stakeholders now with an economic as well as an intellectual investment in the network. We now see, in the debates over control of the domain name space and the form of the next generation IP addresses, a struggle to find the next social structure that will guide the Internet in the future. The form of that structure will be harder to find, given the large number of concerned stakeholders. At the same time, the industry struggles to find the economic rationale for the large investment needed for the future growth, for example to upgrade residential access to a more suitable technology. If the Internet stumbles, it will not be because we lack for technology, vision, or motivation. It will be because we cannot set a direction and march collectively into the future."

*Excerpted from History of the Internet, The Internet Society @ www.isoc.org .*

# THE GOVERNMENT ENTERPRISE OF THE NEW ECONOMY

**LEADER:**

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**GUEST:**

**Ms. Julia Johnson**
Chairman,
*Information Service Technology Development Task Force (Internet Task Force),*
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Vice President of Communications and Marketing,
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**Dr. William Mularie**
Director,
*Defense Advanced Research Projects Agency (DARPA),*
*Arlington, Virginia*

- How are governments addressing the Internet Era? How are their stakeholders and constituents changing? What are the opportunities and challenges?
- As the world becomes even more interconnected and individuals associate with each other across distances which are rapidly disappearing what role will the regional and local governments play in different parts of the world? How are some of them preparing for this?
- What is the role of government in the development of technology and technological infrastructures in the future?

*" On June 11, 1999, with the signing of House Bill 2123, by Governor Jeb Bush, the Florida Legislature created the Information Service Technology Development Task Force. The task force was established for the purpose of developing policies that will benefit residents of this state by fostering the free market development and beneficial use of advanced communications networks and information technologies within this state."*

*"ITflorida.com Is Advancing Florida's Technology Future", Press Release Dated October 18, 2000, www.itflorida.com*

# SEARCHING FOR STRUCTURE IN THE INTERNET ERA

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Vice President,
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Historically, major advances in the technologies of communication and commerce have brought in their wake broad restructuring of relationships among companies and countries, between producers and consumers, and between regulators and the regulated. Discovery of sea routes to Asia in the fifteenth and sixteenth centuries re-balanced the wealth of Europe's greatest cities. Printing reshaped the relationship between urbanites and their government in tenth century China. Completing the steam railroad across the US in 1869 radically altered the spatial economy of the nation, in an era where the production and distribution of physical goods was the source of wealth.

In reflecting on the "information superhighway," analogies to these historic sea changes are natural and persuasive. Viewed closely, the Internet is prompting numerous mundane changes, in laws and business practices. But if we step back and take them in their aggregate, how significant are the changes underway?

## Jurisdictions and the Net

Even as progressive governments forge ahead with free trade agreements, the Internet and Internet-enabled commercial practices leap beyond them by facilitating trade in goods and making trade in services all but borderless. The ease with which services such as entertainment, information provision, date exchange, and correspondence travel the net and cross borders has sharply upset traditional regulatory regimes, based as they were on physical presence. Buying music in a store, in almost every state of the US, triggers a tax event, because the transaction takes place within a state's jurisdiction. Buying from an on-line music store is likely not to engage a sales tax, and transferring a song over Napster (www.napster.com) does not even require a commercial transaction, much less a taxable one. Local police can bust up a street-corner crap game, but Internet users located in non-gambling jurisdictions can play roulette for any stakes virtually seated at casinos around the world.

Consider the impact on revenues. States in the US have their most traditional revenue channels tied to physical presence. The rights of States are defined generally within their borders. Property taxes and sales taxes are examples. Both are under attack from the Internet.

Commercial entities have so much mobility and flexibility in terms of location that they can optimize the location of their activities according to other factors, among them taxes and labor. A North Carolina manufacturer can run his call center in Delhi, no matter where headquarters or factories are located. Sales tax savings often more than offset shipping costs on high value, transportable goods, and Internet cross-state commerce grows aggressively. How will local regulators respond?

Consider the impact on content controls. The distributed structure of the Internet makes it difficult in theory and in practice to attach responsibility for much of its content provision. Although it is apparently possible to penetrate all but the most cunning aliases, for most practical purposes, users can be anonymous, unless they chose to be disclosed and certified. Although PRC law makes it illegal to gamble on the Internet, citizens in the PRC can safely gamble in Nevada or the Isle of Man, in English or in Chinese, over the Internet. Pornography and other undesirable materials are wildly popular and among the most viewed categories on the Internet. Other content and usage abuses thriving on the Internet are securities fraud, pyramid schemes, chain letter fraud, verbal abuse and extortion, money laundering, and retail fraud. From the library reading room to city hall, local governments are hard-pressed to exert any impact on content and activities they were able to control easily until recently. National governments are engaged in discussions that are both legally and technologically unprecedented with transnational entities like Yahoo, in a search for effective regulation of content.

### Intellectual Property and the Net

A major regulatory and structural challenge lies in the realm of intellectual property. March may be the month Napster shuts down, ending only one chapter in the story of a massive challenge to the way intellectual property has been protected and commercialized in the past. The principle that content is increasingly costly to produce yet ever cheaper to replicate, transmit and store is proven as the Internet drives the cost of transmitting and reproducing content to zero. High quality digital music stored in a typical MP3 format requires about 1 megabyte per minute. The 45-60 minutes of a normal album can be acquired free and burned

in less than 8% of a recordable CD, for a storage cost of about 4 cents. Compare to $4 for a good quality cassette tape just five years ago; storage cost has been reduced 99%.

The ineluctable evolution toward the digitized storage and transmission of print, audio, photographic, and video material will force a restructuring of the economics of intellectual property. The time frame, format, and marketing strategy of commercially distributed music is still essentially a legacy of the content limitations of a twelve inch vinyl disk developed in the 1950's, the so-called "album." By far most music consumers were not even born when the LP was developed. They have asked why they should be forced to buy 45 minutes of music when they like only five minutes of it, or carry a portable machine with a 45 minute disk when they can make one at home with 10 hours of favorites on it. How will producers, regulators, and consumers address these challenges and arrive at processes that are fair to all three?

### One Global Marketplace

One could say that the foundational goal of economic and social regulations are maintaining order and fairness in the marketplace, balancing power between producers and consumers, and assuring the security of transactions. In the early days of the Internet, when the overwhelming bulk of e-commerce transactions were in the US and Europe, national governmental and non-governmental entities developed a large canon of structuring rules, regulations, and technologies. These encompassed everything from mechanisms of trust (certification, encryption, digital signatures, and the public key infrastructure) to guidelines for commercialization of information and privacy as well as regulatory and technical procedures for domain registration, packet routing, and network management.

Gradually toward the late 1980's and early 1990's, national entities gave way to transnational ones, as European and North American cooperation led to publications like the European Information Technology Security Evaluation Criteria in 1991 and the Canadian-European Common Criteria of 1996. There were several initiatives by groups like the ECMA, formerly the European Computer Manufacturers Association, but now a worldwide organization with members from the US and Japan. Responsibility for development

and coordination of country code top level domain names (ccTLD) has recently been transferred to the Internet Corporation for Assigned Names and Numbers (ICANN), an international not-for-profit corporation. The trend has been for the regulatory role to ascend from national governments to transnational NGO's, and for industry to play a growing role.

- What are the implications of this for national governments and multi-national companies? What roles do they play and how do they ensure transparency and accountability by the transnational NGO's?

Several unfolding developments will challenge the commercial and technological harmony of the Internet. The Internet, seen as a massive computer network, is a vast web of backbone transmission capacity, routers, and layers of sub-networks. Tying it all together is the Transmission Control Protocol (TCP) and Internet Protocol (IP), two widely deployed protocols that assure compatibility of equipment and more specific application layer protocols. A critical part of this system are consistently defined addressing protocols and technologies that assure packets go where they are intended to go, in order, without dropouts.

Among the most thought-provoking challenges to the harmony of the Internet is the current discussion about domain names in Asia. Network Solutions, until recently the monopoly provider of Internet domain names, confronts an uncompromising China that claims to 'own' the Chinese language and reserves the right to register domain names in Chinese characters. Chinese will be an important language on the Internet (some say it will be the biggest language in five years), but Chinese language computing is already plagued with two different writing styles and several different coding schemes. Now China's designated registrar of domain names, the China Internet Network Information Center (CNNIC), has created a series of top level domain names, unilaterally, without reference to the international ICANN process. TLD's function like country names in postal delivery, and lack of coordination threatens to bring chaos to the Internet, or at least the potential for fragmentation into clusters of networks that cannot interconnect without special intervention.

## SEARCHING FOR STRUCTURE IN THE INTERNET ERA

- What will we do about a renegade player - China or anyone - in the system? How do you prevent this and how to you bring them into line?

There are many issues that confront government, non-government, and industry leaders as they work to provide adequate structure to the dendritic if not gangling organism we call the Internet. In play are both the nature and structure of the regulating and participating organizations as well as the regulations and technologies they oversee. As in all sectors of telecommunications and information industries, the recent, global tide of deregulation demands a robust process of re-regulation to maintain the forward momentum of the New Economy.

- Where is the initiative for re-regulation likely to come from?
- What are the consequences of having it not happen in an effective way?
- Given the risks that this implies what strategies should companies pursue through this kind of uncertainty in the future?

## ALTERNATIVE FUTURES

**Leader:**

**Ms. Nancy A. Doyal**
President,
*The International Forum*

What are the questions for the future?

## LUNCH 12:30 P.M.

*Pavilion Room,*
*The Fairmont San Francisco*

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*Participants of The International Forum are a select group of business leaders from around the world. Each participant is responsible for a major business as a chief executive, is about to assume this role, or is responsible for the international growth of their company.*

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*The faculty and facilitators of The International Forum perform roles as moderators and leaders of sessions, team discussions and projects.*

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*Guests of The International Forum bring experience and perspectives and act as resources to the participants. There are no lectures or lengthy presentations, guests are invited to comment and to join in the discussion with Forum participants.*

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