
New Economic Realities

Implications for Everyone

Minnesota

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Is Anyone Confused?

1999: Twenty-something Internet entrepreneurs are paradigm-shifting geniuses!

2001: Twenty-something Internet entrepreneurs are pathetic chumps who have to move back in with their parents!

1999: Jeff Bezos is Time Magazine's Person of the Year!

2001: Jeff Bezos is the Idiot of the Young Century!

1999: Everyone is going to be a gazillionaire!

2001: Everyone is going to be laid off!

Daniel H. Pink

Fast Company, May 2001

8 Realities Facing Everyone

- **Technology** is a given
- **Globalism** is here to stay
- **Knowledge** builds wealth
- **People** are the most important raw material
- There's **no** such thing as a **smooth ride**
- **Competition** is relentless
- **Alliances** are the way to get things done
- **Place still matters**—but for different reasons

Source: Waits, 1999

Technology is a Given

“Today there is **no** such thing as a **low-tech industry**. There are **only low-tech companies**—that is, companies that fail to use world-class technology and practices to enhance productivity and innovation.”

-- Michael Porter
Harvard Business School

“Cappuccino Economy”

- Milk/foam layer on top: **high growth, fast-moving** companies swirling around the economy
- Coffee layer on bottom: **slow-moving traditional** companies far below

“Two distinct layers, with the top layer slowly mixing in and infiltrating the one below it.”

-- Eileen C. Shapiro
Hill Crest Group
The Seven Deadly Sins of Business

Globalism is Here to Stay

Globalism is a deeply embedded characteristic of the economy. It **will not simply go away** because we don't like some of its worrisome implications or its destabilizing impacts.

Knowledge Builds Wealth

- Wealth is being created by **research, discovery, and innovation**
 - **know what** / scientific knowledge
 - **know how** / technical knowledge
 - **know who** / social knowledge
- Economic landscape is filled with **“invisible firms”**
 - **gazelles** created 70% of the net new jobs
 - **genomics revolution**-- and virtually no one knows anything about it.

Ideas Are Driving the Economy

“The first 100 years of our country’s history were about who could build the biggest, most efficient farm.

The second 100 years were about the race to build efficient factories.

The third 100 years are about ideas.”

New Growth Theory and Innovation

- **Stanford Economist Paul Romer says ideas are the primary source of economic growth.**
- **“Recipes (new ideas) combine ingredients (resources) in new and different ways to yield more valuable economic results.”**
- **The recipes come from the innovation process.**

New Growth Theory: A Paul Romer Perspective

Ingredients

- Intellectual capital
- Human capital
- Financial capital

Recipes

- New ideas
- Entrepreneurs
- Networks

Results

- Productivity
- Prosperity
- Cluster vitality

Innovation Critical in All Industries

- *Agriculture*—e.g., genetics, improved farming practices, better storage raising productivity
- *Forest Products*—e.g., engineered products, use wider range of species transforming product content and mix
- *Manufacturing*—e.g., internet transforming B2B relationships, customer service
- *Creative Services*—e.g., technology change blurring traditional craft distinctions; local suppliers collaborate, share capacity

People Are the Most Important Raw Material

Composition of the Workforce

From

Office + services: 60%

Factory + farm: 40%

To

Office + services: 80%

Factory + farm: 20%

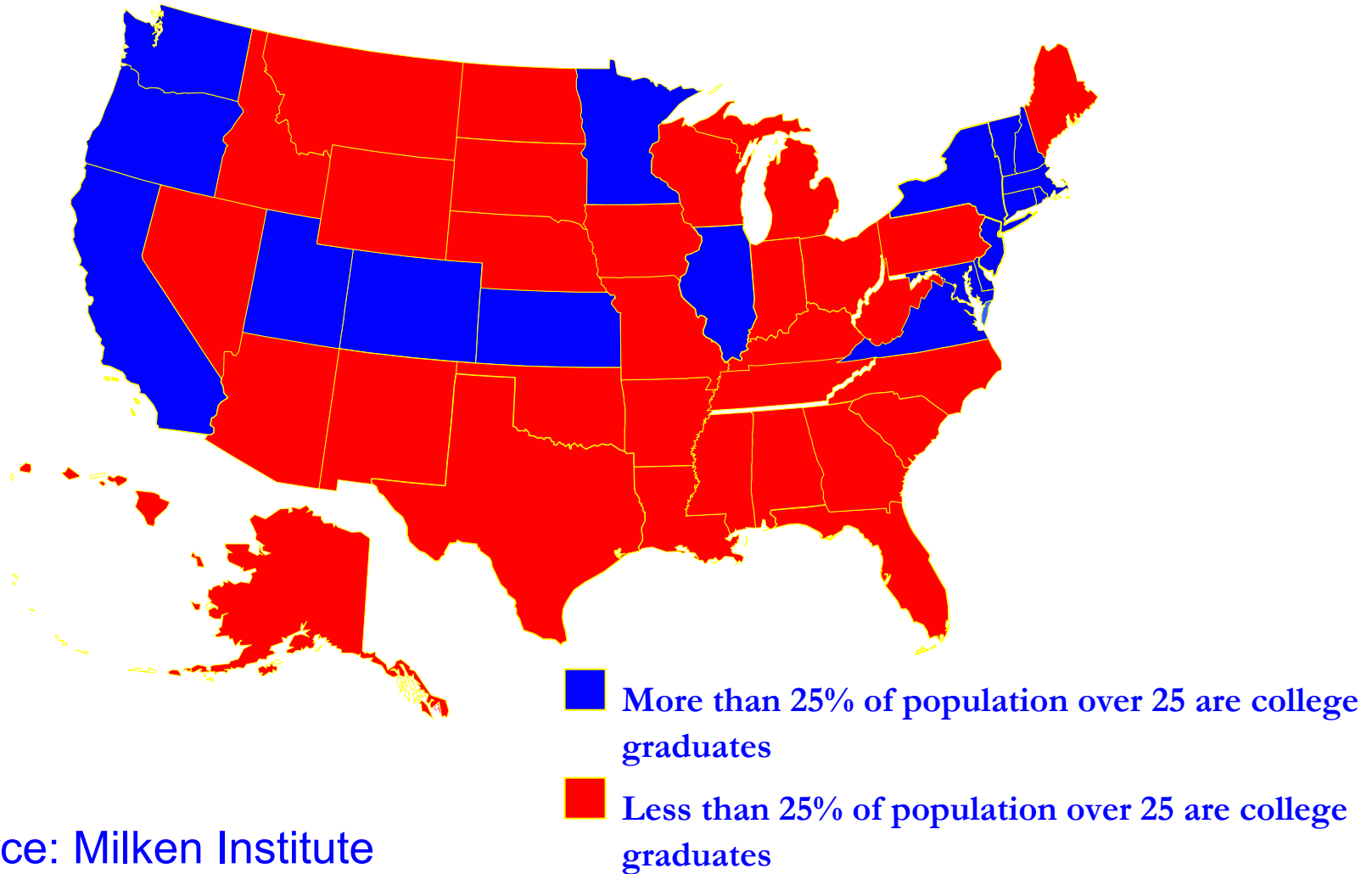
Source: Progressive Policy Institute, *The New Economy Index*

Competitive Advantage Lies In Brain Power

• **Individuals are the new “means of production.”** Individuals apply their knowledge to write software, manage mutual funds, solve technology problems, and develop new products.

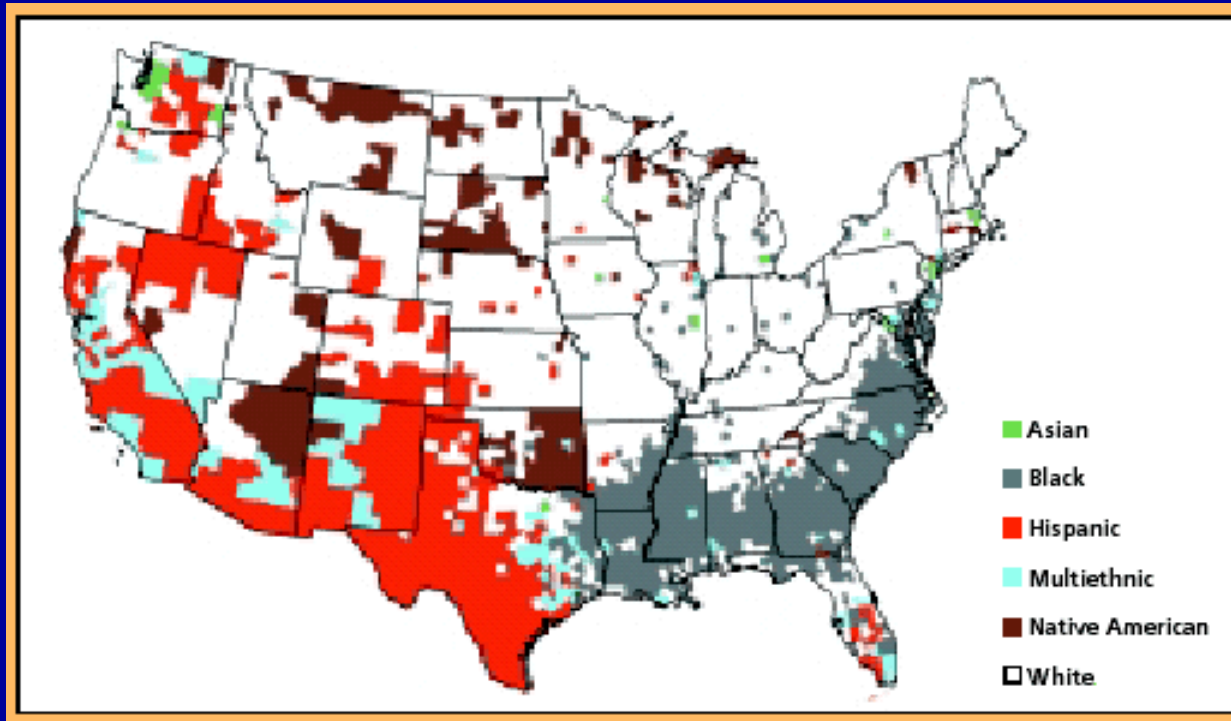
• **Individuals are the key to innovation.** “If we make great technology, that’s only because we’ve been able to hire great engineers.”

Education Attainment



Source: Milken Institute

Potential Talent Boom or Bust?



Source: Steve Doig, Arizona State University. Based on map by William H. Frey for *American Demographics*, June 2001. Used by Permission.

People Are the Most Important Raw Material

As Stanford Economist Paul Romer has eloquently stated,

the only form of capital with infinite potential returns is human capital.

Source of Wealth

- The single factor with the greatest power to explain differences in per capita income between states is the percentage of college graduates.
- On average, a one-year increase in a metro area's educational level raises wages by 3 to 5 percent.

Source: Milken Institute, 2002

S&T Source of Wealth

“Although high-tech is not the only development strategy to pursue, it will be the key distinguishing feature of regional vitality in the 21st century.”

More than three-fourths of personal income growth can be tied to increases in technology output.

Milken Institute, 2002

There's No Such Thing as a Smooth Ride

Years ago, economist Joseph Schumpeter warned that progress requires the destruction of the old as well as the creation of the new. He termed this process **“creative destruction.”**

Wired editor Kevin Kelly simply calls it **“churn.”**

Smart Thought

Memo to the folks in Silicon Valley:

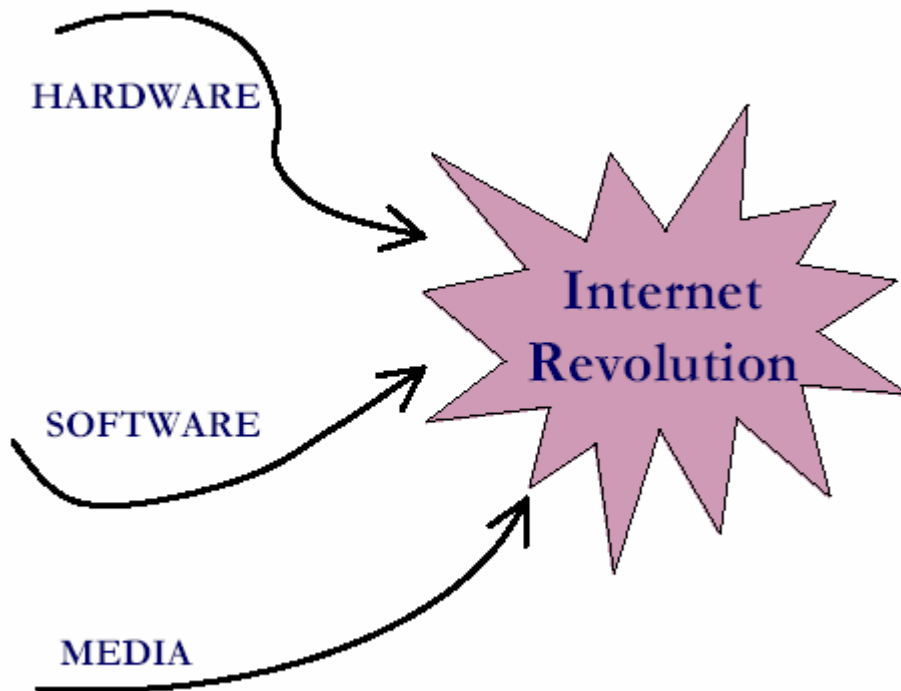
You will have good jobs for 20 more years. By 2020 though, computer chips will be cheaper than bubble-gum wrappers, and PCs will be in museums....

A whole new generation of computers will emerge: DNA computers, protein computers, quantum-dot computers. **Silicon Valley will become the Rust Belt of the new economy.**

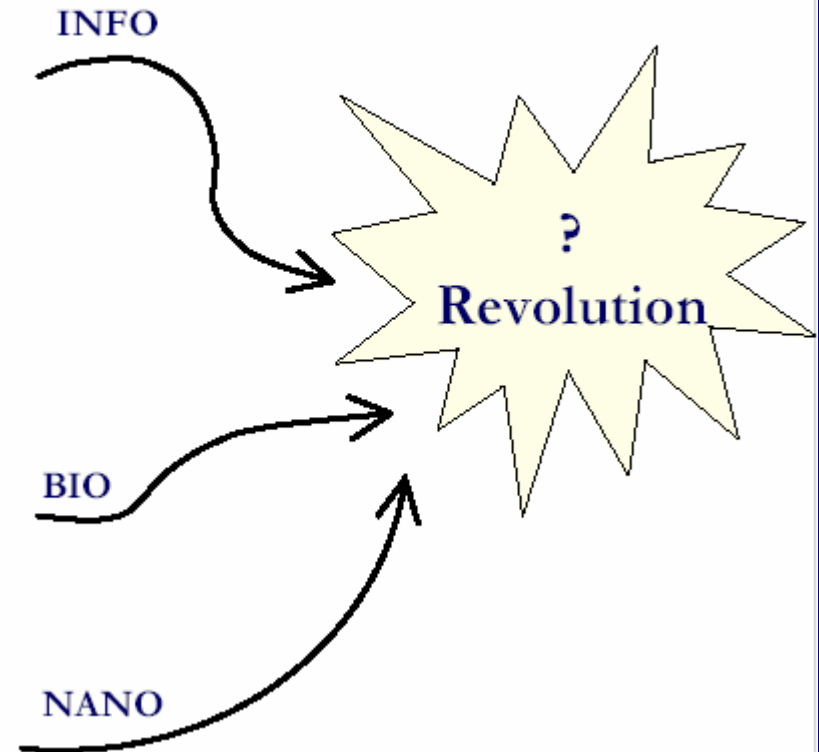
-- Michio Kaku
*Visions: How Science Will
Revolutionize the 21st Century*

Next Wave May Be A Convergence

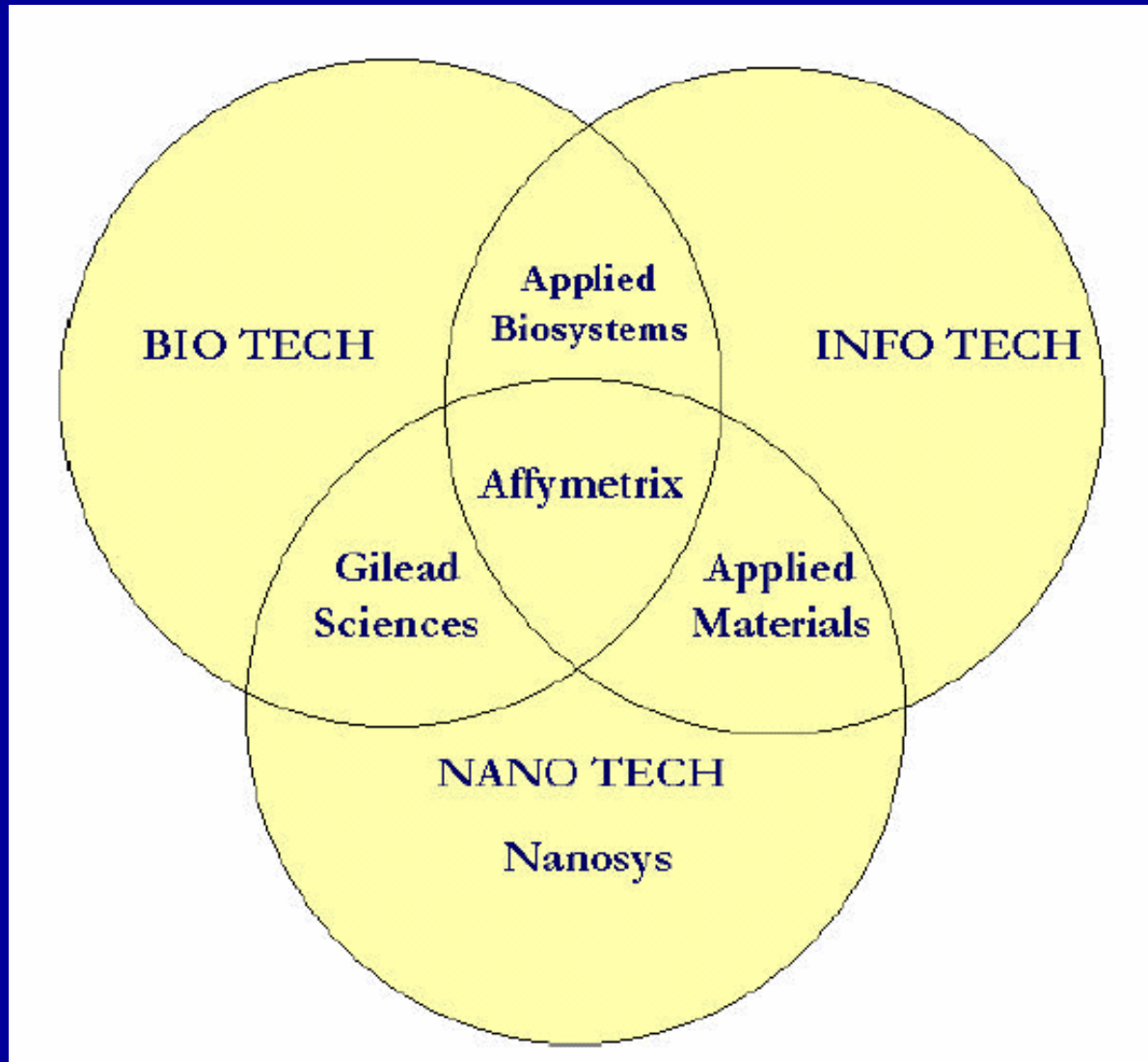
1990s Convergence



Next Convergence



Examples of Convergence



Competition is Relentless

- **Global rivals**
- **No immunity from competition (deregulation)**
- **Numbers of new businesses added yearly**
- **Competitors coming from outside the industry**
- **Information technology**
- **E-commerce**
- **Competing against the clock and oneself**

Alliances are a Competitive Necessity

Business is learning that if it wants to
compete aggressively it has to
collaborate generously.

New Economy is a Networked Economy

Then

Vertical integration

Large firms

Hierarchical
relationships

Isolated firms

Stability

Now

Specialization

Medium / small firms

Horizontal
relationships

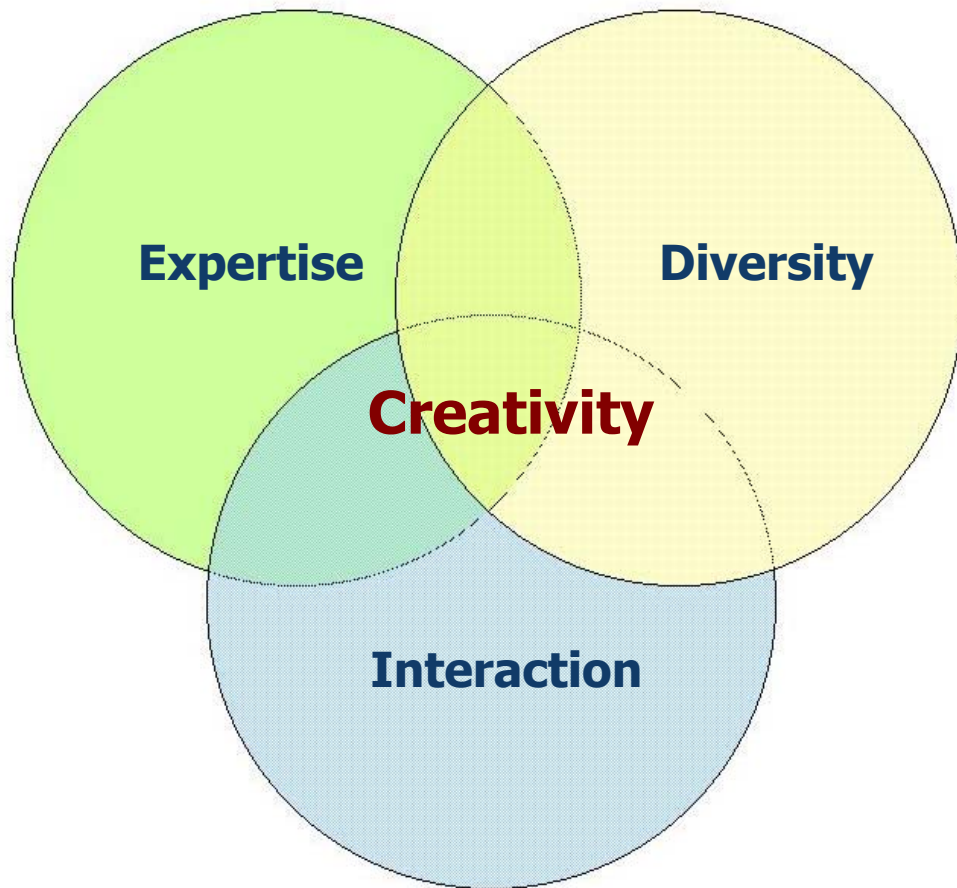
Connected firms

Change

Why Are Alliances So Important ?

- Companies can concentrate on **core activities**
- It is the **key to new ideas, speed, and flexibility**
- **Collaboration with universities** for new ideas
- **Joint ventures** provide quick entry into new markets
- **Working with suppliers** enhances products and services
- **Customer relationships** provide early insights into demands and needs

The EDI's of Innovation



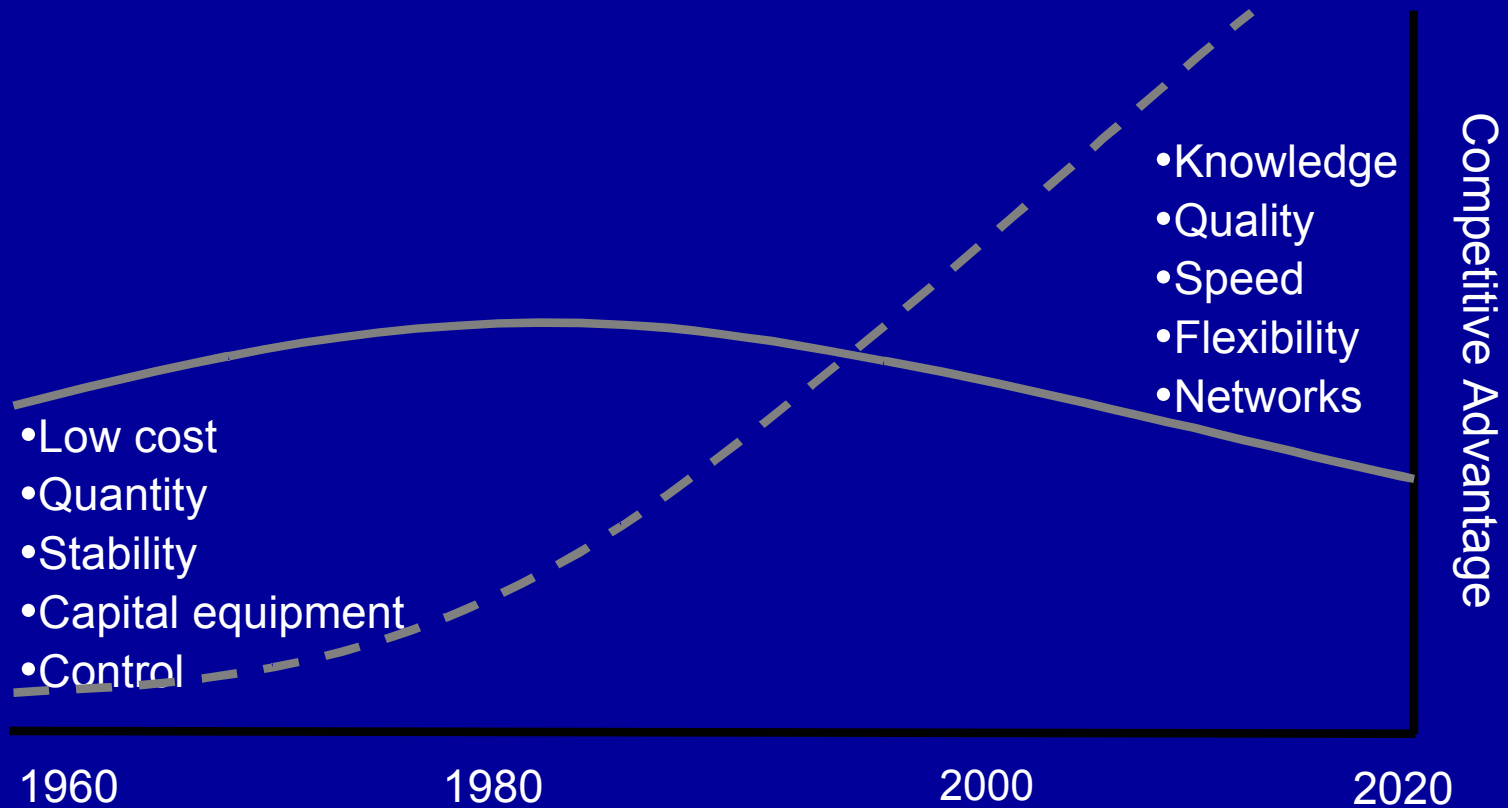
- **EXPERTISE** means talented people
- **INTERACTION** when people come together, there's a better chance for the passionate exchange of ideas & synergies that create new business models, marketing plans or products
- **DIVERSITY** is important in generating the "Next Big Thing"; people learn most by interacting with people less like themselves.

Place Still Matters — But for Different Reasons

“The enduring competitive advantages in a global economy lie increasingly in **local things—knowledge, relationships, motivation**—that distant rivals cannot match.”

Michael Porter
Harvard Business School

Competitive Advantage



Innovation is tied to Place

- The creative heart and soul of the economy will continue to be tied to place.
- **Most innovative work occurs in face-to-face exchange within teams.**
- Geographic clustering is a powerful mechanism for sharing personal knowledge.

Quality of Place Draws Talent

More and more companies & skilled labor locate where they want—not where they must.

Ross Devol, *The Milken Institute Review*, 2002

“Wherever knowledge workers cluster, whether in small towns or in big cities, that is where wealth will accumulate.”

- Joel Kotkin

“Digital Geography: The Remaking of City and Countryside in the New Economy”

“Sophisticated Consumers of Place”

“Arugula is how I define cities. I go to a grocery store, and either you can get arugula or you can’t.”

Cindy Crawford

international super model

Complex Calculation for Quality of Place

Natural environment counts for a lot.

But natural features aren't enough. Places must have distinctive urban amenities as well.

Choice (in lifestyle) matters in the talent war.

Being a smart, innovative place matters.

It's not just about physical attributes. Intangibles such as "hipness," tolerance, and entrepreneurial culture are part of the calculation.

Speed is a vital amenity.

Most Important Sources of Prosperity are Created

Created Assets

- Top universities
- Research centers
- Entrepreneurial culture
- Talented people
- Vibrant downtowns
- Networks

Inherited Assets

- Geography
- Climate
- Population

Elements of a Knowledge-based Economy

5 tangible elements:

- A strong intellectual infrastructure (universities and firms generating new knowledge and discoveries)
- Mechanisms through which knowledge is transferred from person-to-person / firm-to-firm
- Excellent physical infrastructure (high-speed internet)
- A highly skilled technical workforce
- Good sources of capital

2 intangible elements:

- Entrepreneurial culture
- Quality of life

Source: National Governors Association

The Challenge: Strategic, Sustained Civic Effort

- Some of the most important “quality of place” and competitive advantages are not accidental but the result of combined strategic effort and sustained civic effort.
- The new century will be a highly competitive one—especially as cities and regions realize that key features are “buildable” and thus can be had by nearly any place that puts its mind to it.

New Reality: Civic Leadership in Transition



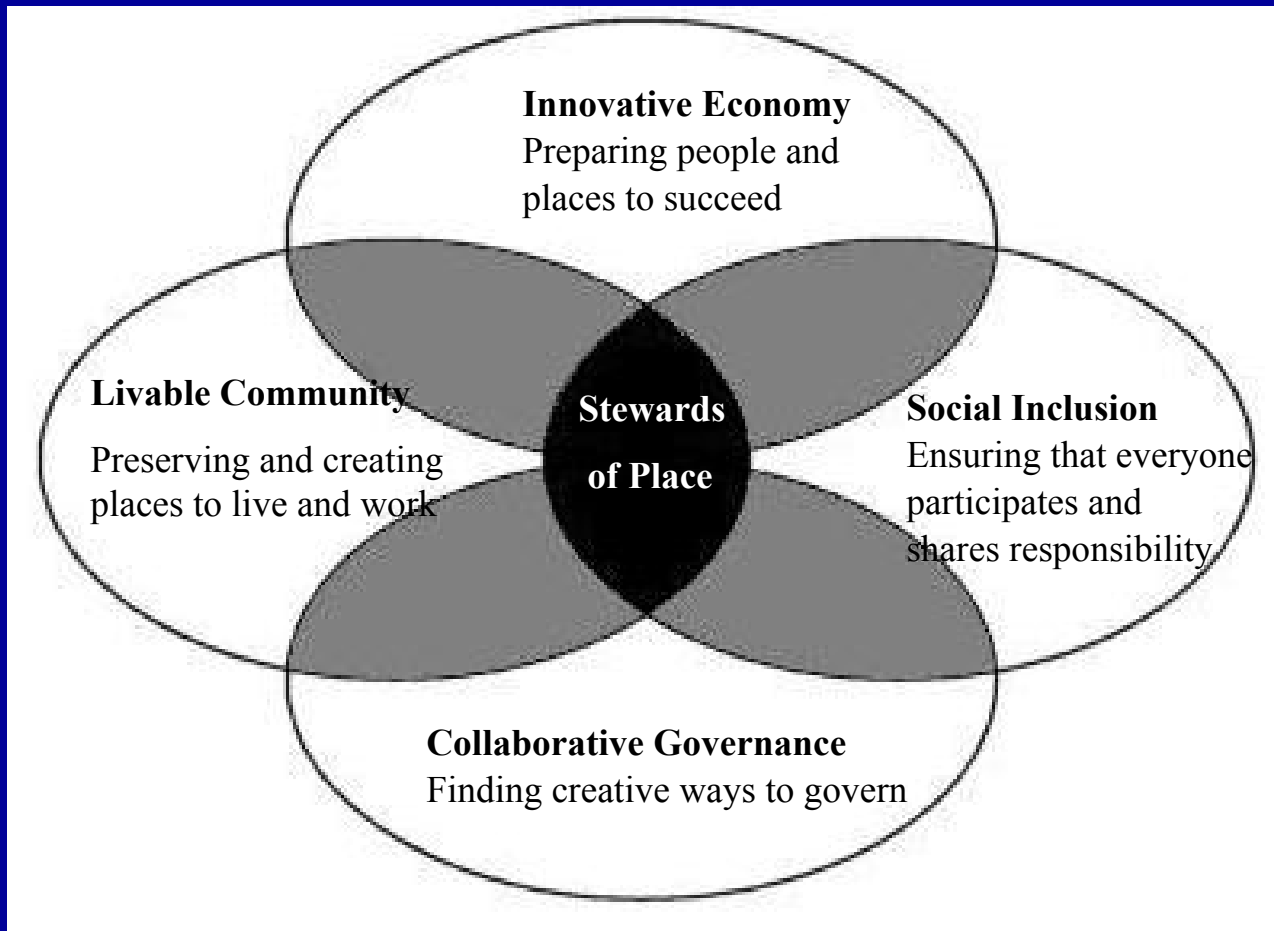
- Globalization of business changes the meaning of place
- New technologies change time and space
- Changing demographics change the profile of leadership
- New reality: The anonymity of civic leadership

The Challenge: Finding Stewards of Place

New Leadership Model

- Regional Stewardship: commitment to place
- Traditional Leadership: commitment to an issue/cause
- Stewards understand the interdependence between the economy, society, and environment

Framework for Regional Leadership



Team of Regional Stewards

- **Integrators**—share perspective about linked economic, environmental, social objectives
- **Connectors**—bring people together across worlds, “boundary crossers”
- **Communicators of Possibility**—raise aspirations, articulate potential, persuade
