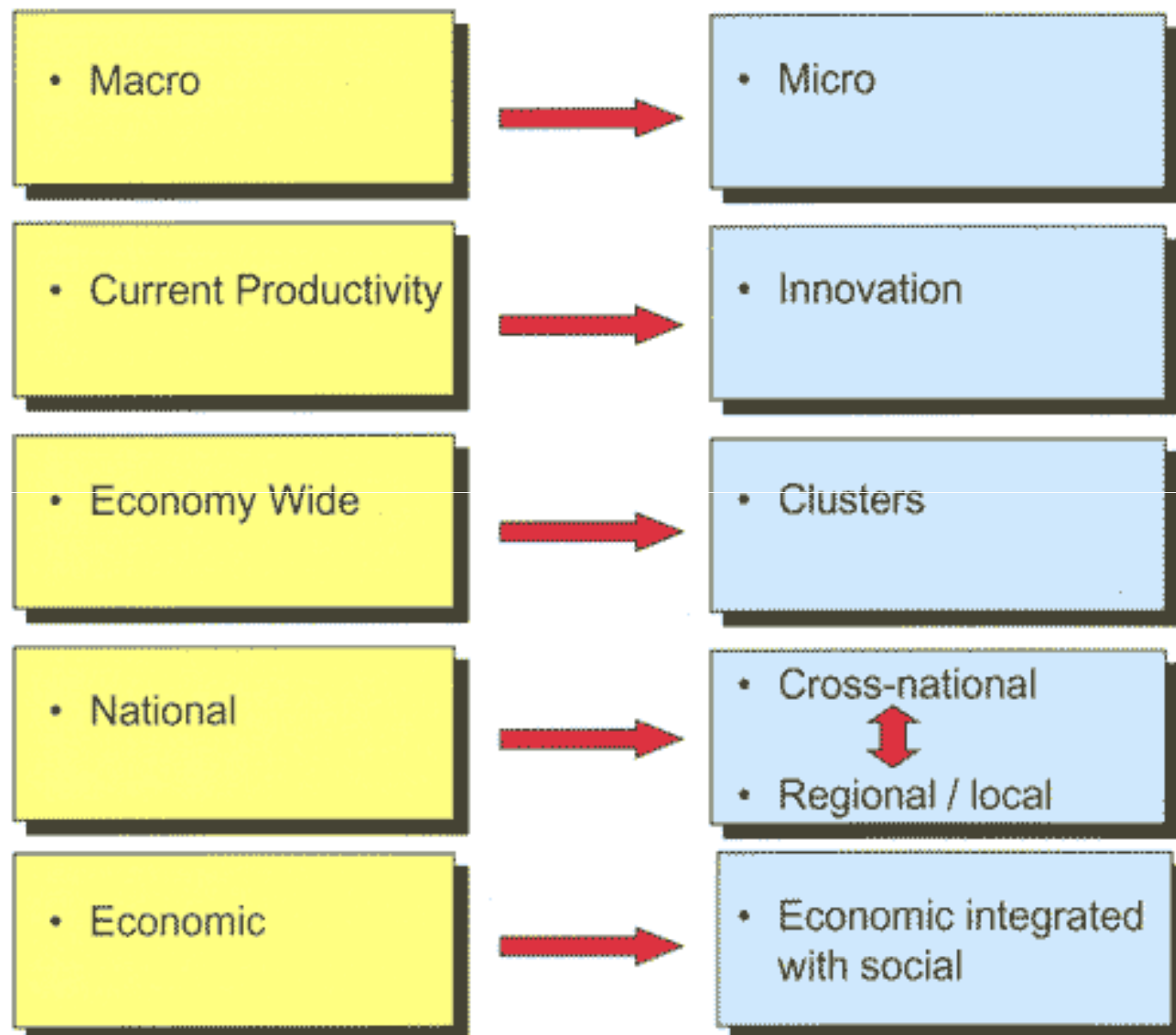


# Economic Policy, Productivity, and Competitive Advantage

From the work of Michael Porter  
Harvard University

# The Shifting Economic Policy Agenda



# Determinants of Productivity and Productivity Growth

Macroeconomic, Political, and Legal Context

Microeconomic Foundations

Internal



External



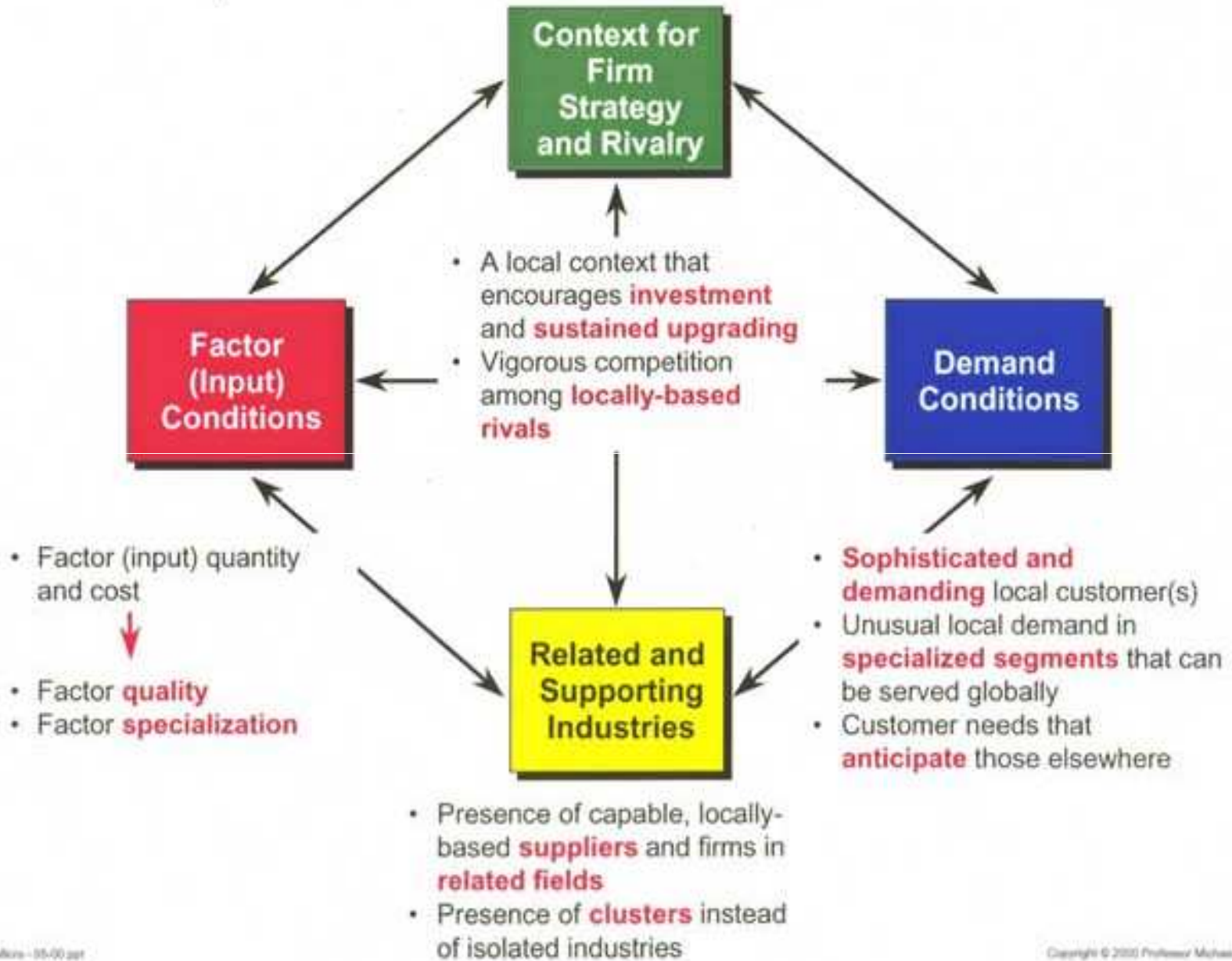
# Sources of Competitive Advantage

- Business environment (taxes, supportive infrastructure);
- Location;
- Local infrastructure (roads, utilities, communications);
- Knowledge base (workforce, education system);

# Sources of Competitive Advantage

- Local markets;
- Intense local rivalry with competing firms;
- Variety of local suppliers and other inputs to the core industry;
- Skilled local workforce that is attuned to the needs of the industry.

# Productivity and the Microeconomic Business Environment



# Where Should We Invest Our Public Dollars?

- Local industries that have a chance for long-term growth and success because they have some sort of local competitive advantage;
- Local industries with a competitive advantage that grow gold-collar (high skill, high pay, high demand) jobs.

# What is an Industry Cluster?

“A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities.”

Michael Porter

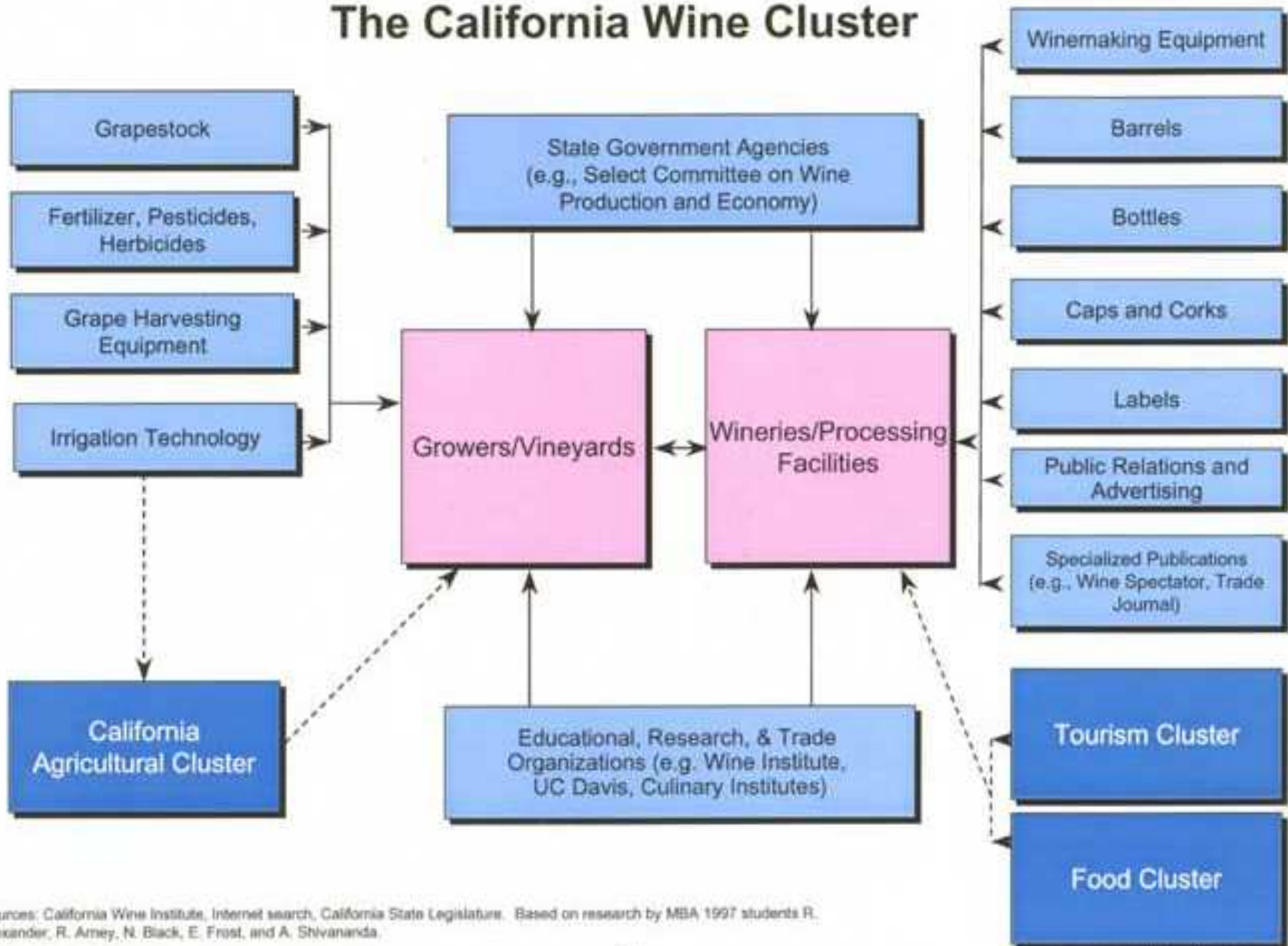
# Cluster Components

- End-product or service companies;
- Suppliers of specialized inputs, components, machinery, financing and services;
- Firms in related and downstream industries (channels, distribution networks, customers);
- Producers of complementary products;

# Cluster Components

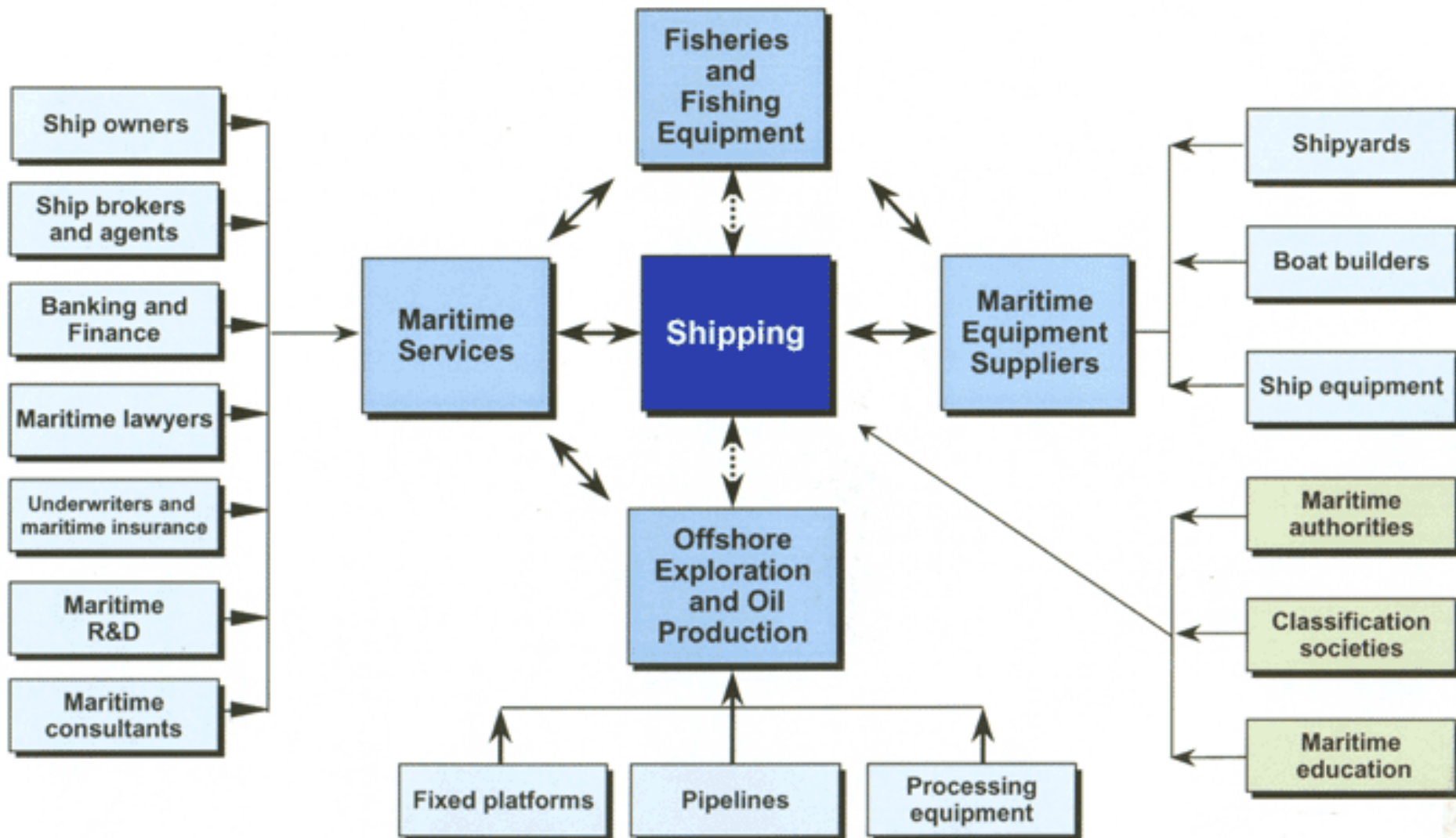
- Specialized infrastructure providers;
- Government and other institutions providing specialized training, education, information, research, and technical support;
- Standards-setting and influential government agencies;
- Trade associations and other collective private sector bodies.

# The California Wine Cluster



Sources: California Wine Institute, Internet search, California State Legislature. Based on research by MBA 1997 students R. Alexander, R. Arney, N. Black, E. Frost, and A. Shivananda.

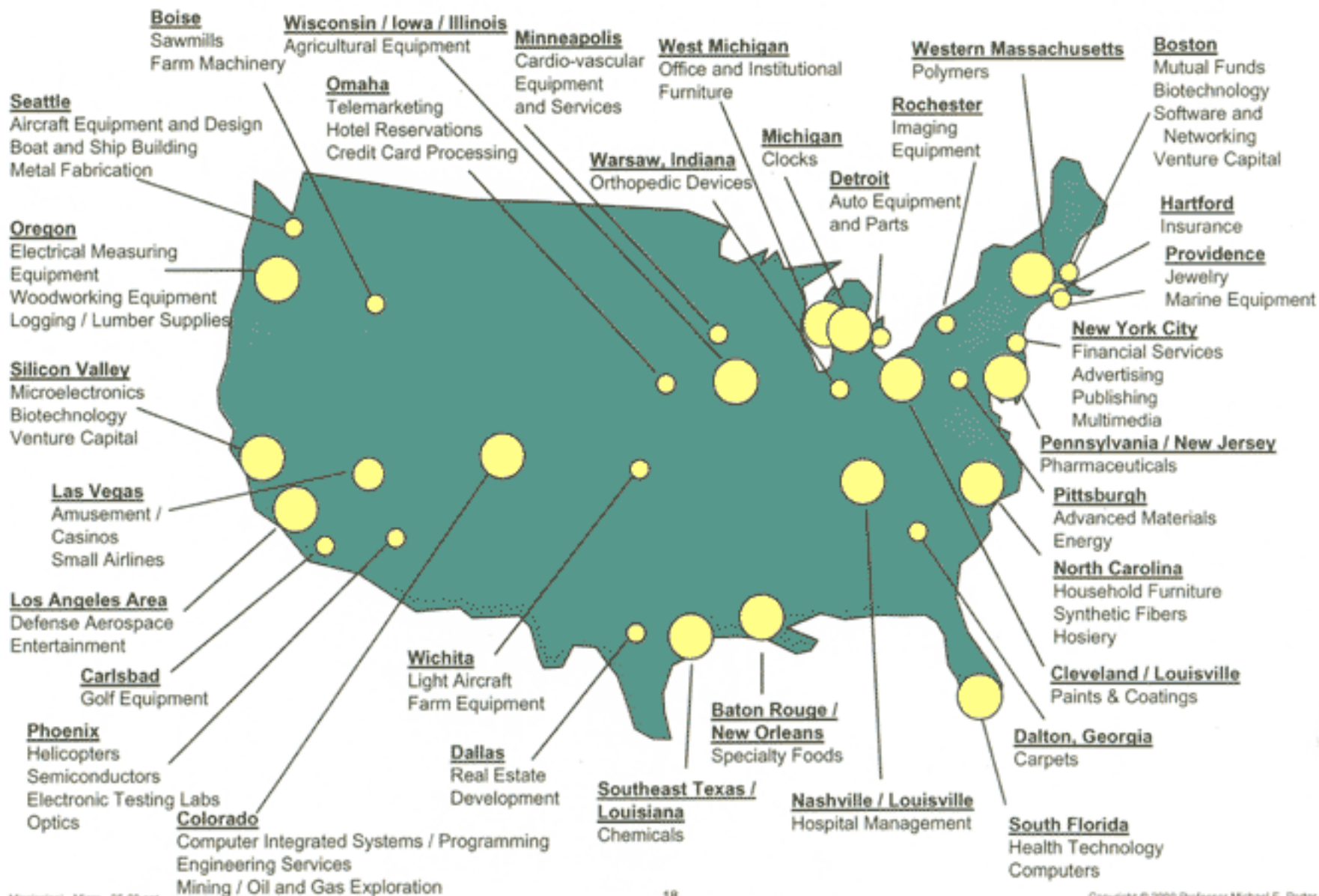
# The Norwegian Maritime Cluster



- Norway has 0.1% of the world's population, represents 1.0% of the world's economy, yet accounts for 10% of world seaborne transportation

Source: Sven Ullring, presented to M.I.T.

# Selected Regional Clusters of Competitive U.S. Industries



# Clusters and Competitive Advantage

## Productivity

- Efficient access to information, specialized inputs and employees, institutions, and “public goods”
- Achieving complementarities across business
- Better incentives and performance measurement

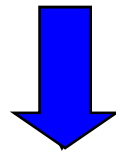
## Innovation

- Ability to perceive and respond to innovation opportunities
- Rapid diffusion of improvements

# Clusters and Competitive Advantage

## New Business Formation

- Perceiving opportunities for new business
- Lowering barriers to entry (including perceived risk)



Competition is fundamentally affected by externalities/linkages across firms, industries, and associated institutions

# Successful Cluster Initiatives

- Shared understanding of competitiveness and the role of clusters;
- Private sector led with government participation;
- Focus on removing obstacles and easing constraints to cluster upgrading (rather than seeking subsidies or limiting competition);
- Encompass (over time) all clusters in a region;

# Successful Cluster Initiatives

- Appropriate cluster boundaries;
- Wide involvement of cluster participants as well as associated institutions;
- Attention to personal relationships to facilitate linkages, foster open communications, and build trust;
- A bias toward action;
- Institutionalized by the private sector.

# An Industry Cluster-Based Approach to Conceptualizing Workforce Development

- Cluster Definition;
- Survey of Occupations;
- Understanding Career Ladders;
- Mapping of Skills;
- Address Barriers and Gaps in System of Skill Acquisition.

# Cluster Definition

- Quantitative analysis of employment and payroll data;
- Qualitative research into the web of relationships in the cluster;
- Validation with cluster employers;
- Drawing and redrawing the map.