

Mapping Arizona's Cluster Landscape

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The Competitiveness Institute 4th Annual Meeting

Clusters and the New Economy

28-31 October 2001
La Paloma Resort
Tucson, Arizona USA



UA/OED Regional Economic Development Support

UA/OED Cluster Research, 1990-2001

- ◆ Targeted industry studies
- ◆ Industry directories/databases
- ◆ Industry benchmarking and progress reports
- ◆ Special assignments
 - ▶ workforce development, defense restructuring, defining supply relationships, strategic planning processes, etc.

Two Examples

- ◆ Targeted Industry Study model
 - ▶ A comprehensive body of critical industry information for developing early-stage cluster strategies or later-stage strategic path assessment
- ◆ 2001 Directory, Benchmark, and Supply Chain Development Databases
 - ▶ Six-cluster project to measure progress, promote firms, and fuel and steer business development programs

Targeted Industry Study (UAOED model)



- ◆ Four components
 - ▶ Global-to-local industry analysis
 - ▶ Regional research and tertiary education review and assessment
 - ▶ Regional industry directory and overview
 - ▶ Executive summary and recommendations
- ◆ Plus a new one...
 - ▶ ED strategies and cluster best practices review

Initial Elements

- ◆ Selection of the subject industry and region
 - ▶ tends to be self-selecting
 - ▶ critical mass issues for cluster formation or operation; for industry definition or regional boundaries
 - ▶ use economic regions, not political boundaries
- ◆ Building of cluster/study support coalition
 - ▶ project funding partnership
 - ▶ participation and input in study
 - ▶ *most important* – to implement results
- ◆ Resources
 - ▶ 6-month timeframe requires 3 FTE staff
 - ▶ travel budget, survey expenses

Targeted Industry Study (UAOED model)

Global-to-local industry analysis



Develop a picture of the industry's present and future

- ◆ real-time national and local industry surveys, executive focus groups and "key-player interviews" supplement a literature review
- ◆ ranks subject region relative to competing regions and national patterns
- ◆ opportunities/threats associated with evolving technology and competition

Regional Research and Tertiary Education/Training Review



Catalogue and evaluate regional technology development and training assets

- ◆ Detailed account of key research facility capabilities, features and partnerships
- ◆ Compare availability and access to key degree, certificate and non-credit training programs with employers quality and quantity needs
- ◆ Particular attention paid to enabling disciplines such as entrepreneurship and other business, engineering, life sciences, etc.

Targeted Industry Study (UAOED model)

Regional Industry Directory & Overview

- ◆ A compilation of local industry resources stimulates networking and local supplier relationships
 - ▶ directory survey goes beyond company profile content to create aggregate “state of the industry” report
 - ▶ logical first product for new cluster
 - ▶ company surveys provide early outreach opportunity to inform potential members
 - ▶ “most used” desk reference
 - challenge to maintain on-line



ED Strategies and Cluster Best Practices

- ◆ What makes the subject industry grow in successful regions?
 - ▶ site investigations crucial
 - ▶ determine what was done by the industry and those who support it to generate local success
- ◆ Target regions with cluster strategies
 - ▶ learn from the successful strategies and mistakes of others

Targeted Industry Study (UAOED model)

Summary and Recommendations



- ◆ Most widely read and distributed study component
- ◆ Hard-hitting recommendations are a prescription for the cluster's future
- ◆ Targets the business and public organizations that impact, or are impacted by, the vitality of the subject cluster industry

Results

- ◆ TIS characterization of Optics and Bioindustry industries led directly to the creation of these clusters in Arizona
 - ▶ used by other clusters to support strategic planning initiatives
- ◆ Only source of recent economic data for local hi-tech industries; used to guide local and state policy decisions

Research as a Program Enabler...

2001 Southern Arizona All-Cluster
Directory, Benchmarking and
Supply Chain DataBase Project

2001 All-Cluster Directory, Benchmarking and Supply Chain DataBase Project

Economic region:

- ◆ Southern Arizona
 - ▶ Pima, Santa Cruz and Cochise Counties

Subject cluster industries:

- ◆ Aerospace
- ◆ Bioindustry
- ◆ Environmental Technology
- ◆ Information Technology
- ◆ Optics/Photonics
- ◆ Plastics and Advanced Composite Materials

2001 All-Cluster Directory, Benchmarking and Supply Chain DataBase Project

Unique project partnership

Funding:

- State of Arizona
- Pima County
- City of Tucson
- University of Arizona
- Southern Arizona Tech Council
- US Department of Commerce

Implementation:

- City of Tucson OED
- University of Arizona OED
- Southern Arizona Tech Council
- AZTechDirectory
- Aero, Bio, Enviro, IT, Optics and Plastics Clusters

2001 All-Cluster Directory, Benchmarking and Supply Chain DataBase Project

Comprehensive survey creates multi-purpose database:

- ◆ 400+ company profiles for a new web-based directory
- ◆ All-cluster, region-wide benchmark
 - ▶ benefit of “one moment, one method” data collection
 - concurrent cluster surveys best explore real-time sectoral interrelationships
 - ▶ baseline for measuring industry change over time
- ◆ Local hi-tech supplier database for business program support
 - ▶ enhancement of regional business-to-business supplier and other enterprise relationships

2001 All-Cluster Directory, Benchmarking and Supply Chain DataBase Project

Products/Benefits

1. Upload 400+ Southern Arizona firms to online AZTechDirectory

- ▶ ties many separate databases together in a single, publicly accessible site
- ▶ more efficient maintenance, less burden to cluster organizations

2001 All-Cluster Directory, Benchmarking and Supply Chain DataBase Project

Products/Benefits (cont.)

2. Baseline "State of the Clusters" report

- ▶ (first) annual all-cluster snapshot of status and vitality
- ▶ evaluate effectiveness of cluster programs over time
- ▶ monitor industry trends, respond to warning signs

2001 All-Cluster Directory, Benchmarking and Supply Chain DataBase Project

Products/Benefits (cont.)

3. Comprehensive supply chain information platform for City of Tucson's new Federally-funded BusinessLINK program

- ▶ utilizes a formal mentor-protégé program, a supplier development program, and an online database to promote small business growth by linking them with larger businesses

Copies of this presentation will be available to members of The Competitiveness Institute via the TCI website.

Copies of the survey instrument used for the Directory, Benchmark and Supply Chain Development Study are available via email request from the presenter.

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