

Industry Analysis and Economic Development Plans

Why do we want to analyze industries? How does it contribute to formulating economic development plans?

1. Better understand the major industries in our economy: their impact on the economy, their prospects and their relationships to other parts of the economy.
2. Assess market and competitive challenges facing key local industries. What determines competitive success in this businesses and product market? What do firms need to do to succeed?
3. What does the industry environment and local firms' industry position and competitive strategies suggest about their future contribution to local economic development goals?
4. What role can local policies and initiatives play in helping key industries achieve competitive success, meet their major challenges, and generate desired economic development outcomes?

Traded vs. Local Industries

Economic Development Lens for Industry Analysis

1. Local impacts: number and quality of jobs, workforce, local suppliers and customers, environmental impacts.
2. Opportunities growth, diversification, inter-industry linkages and improved environmental practices.
3. Local factors that are most important to these industries and the nature of local advantages
4. Strengths and weaknesses of key local\regional industries
5. Market failures, constraints, and obstacles to industry success and achieving economic development outcomes
6. Defining policies and activities to enhance industry performance, advance sustainable practices, foster spin-offs, diversification, and new sources of growth. Design more effective policies by reinforcing and complimenting the business strategies of local firms.
7. Developing strategies to link industry jobs, procurement and other benefits to targeted groups and areas, i.e., realized desired economic development outcomes. Benefits do not automatically trickle down but require specific interventions and institutional linkages.

These objectives are broader than conventional industry analysis; we can use their methods but need to add research to address the last three issues.

Industry Analysis Outline

Overall Industry Conditions

Definition of the business--its major products and services
Markets served, nature of customers, customers relationships to producers
Market size and projected growth
Related markets and diversification opportunities
Industry size and trends: number of firms, employment,
Industry structure and competition
 Size and location of firms
 Existing competitors, location and strategies
 Barriers to entry
 Role of government policies and regulation
 Potential competitors and substitute products
Production process technology, organization, and labor role
Supplier role and relationships
Cost structure
Sales and distribution channels
Basis of competition and sources of competitive advantage
Major trends and innovations: their impact on the basis of competition and the competitive position of the local industry

Local industry

Local producers and suppliers, and their role in the industry
Supplier, inter-firm relationships, and industry organization/associations
Firm's labor force and its organization, key occupations/jobs, wage levels
Competitive position of the local industry and major competitive threats
Strategy of major local firms
Competitive strengths and weaknesses of local industry
Factor requirements and their role in local competitiveness
 Labor force and skills, capital, land, infrastructure, technology, raw materials
Obstacles and constraints to growth and competitiveness
Potential strategies and activities to:

- strengthen competitive position of local industry
- enhance or realize growth opportunities
- diversify the local industry
- attract new firms in industry
- target employment, purchasing, and other benefits to areas and groups

Competition and Industry Analysis

Central question is what determines competitive success in the industry? Understanding the basis of competition provides insight into industry dynamics. You can then build on this understanding to define economic development activities.

This issue entails three questions:

1. What is the primary basis of competition in the industry or product/service market? How do firms seek to gain market share and sustain profitability?
2. Who are the existing and potential competitors, what is their competitive position and strategies to gain competitive advantage?
3. Within this competitive environment, what can be done to help local firms strengthen their position and leverage their advantages and local assets to compete successfully

Major dimensions along which firms compete

1. Product Cost
2. Product Quality\Performance
3. Service (e.g., after sales service, fast turnaround, convenience, etc.)
4. Image ("Brand" differentiation)

Within each type of competition, it is critical to sustain a total cost advantage. Across industries, different costs provide the best opportunity for achieving large **cost advantages relative to competitors.**

Cost advantage can be gained in many ways:

1. Material cost advantages through volume purchasing
2. Manufacturing costs advantages through scale:
 - yield (less use and cost of inputs)
 - run length (esp. w\high set up cost)
 - proprietary technology

Japanese firms succeeded in gaining a manufacturing cost advantage via many improvements that integrated design & manufacturing

3. Marketing and distribution:
 - Economies of scale in distribution and service
 - Creating new, lower cost distribution channels, e.g., Japanese TV producers gained market share by selling through mass merchandisers rather than appliance stores
 - Internet is reshaping the competitive environment in many businesses by changing the nature and role of distribution
4. Applications engineering -- tailoring a product or service to meet a customer's needs. This involves understanding the unique applications, standardizing product or system modules for different applications, regularly updating products as customer needs change.
5. Research and Development – introducing new products or innovations more quickly, achieving high market share over a "product generation", securing a proprietary advantage. Pharmaceuticals are R&D driven.

Economic development roles vary with the type of cost advantage:

Competitive Advantage

Volume purchasing

Economic Development Roles

Transportation &
Infrastructure
Buying Cooperatives

Manufacturing costs

Engineering Assistance
(Industrial Extensive Services)
Labor Force Training
Facilities & Equipment Finance

Marketing & distribution

Export Assistance
Transportation & Infrastructure

Applications engineering

Technology Development
Technology Diffusion
Venture Capital Financing
Labor Force Training

Research and Development

Technology Development
Venture Capital Financing
Labor Force Training

Information Sources and Research Tasks

Collection and analysis of secondary economic data

- Industry size, firm size, growth trends, occupations, wage levels

Review secondary industry data (US Industrial Outlook, Trade Associations, Census Bureau)

- Industry definition, products, customers, market size and growth, key trends, some information on competition and regulatory/policy issues

Find and review studies from government, trade associations, consulting firms, universities, and business schools, and review business and trade press

- More detailed information on market, production process and technology, suppliers, cost structure, competition and sources of competitive advantages, business strategies and major trends

Find studies and articles through web searches, key web sites, publication database searches, and industry experts

Surveys industry firms

Interviews and focus groups

1. Industry analysts and experts (US DOC, business schools, investment firms, consulting firms, trade association staff)
2. Industry firms
3. Customers, suppliers and service firms

Scope of research depend on your goals, number of industries to study and the available time and resources

North Carolina Apparel Example

1. Industry consists large firms' plants for volume production of standardized goods in several product categories:
 - women and children's underwear
 - men's and boys' shirts
 - outwear
 - knitted products
2. Industry competing based on price
3. Facing and responding to competition from foreign producers with lower labor costs
4. Competitive response also involves reducing unit costs by:
 - Use of new technologies to reduce inventories, material waste and labor component
 - Restructuring work into teams to raise productivity & quality
5. Local advantages for industry
 - Low labor costs, non-unionized labor
 - Transportation access
 - Proximity to suppliers (textile firms)
6. Outcomes—not completely clear. Productivity appears to be increasing, employment stable despite lower labor content
7. ED implications
 - Is this a good industry to target for economic development?
 - If yes, what are key needs and potential interventions?
8. Strengths and weaknesses of the industry analysis
 - Strengths: provides history, focuses on basis for competition, competitive factors shaping firms' actions, detailed look at operations and their results—especially on labor
 - Weakness: doesn't look at market and demand factors, no focus of ED outcomes
9. Sources and methods used in the analysis

Cluster Analysis

ICF Slides

Held Article

Industry vs. cluster analysis

What are their relative advantages and disadvantages?

Are they substitutes or compliments?

What might lead you to use one approach vs. the other?

Held Article

James Held article provides a useful way to think about clusters and an economic development framework for analyzing them

What are the types of clusters Held talks about?

Vertically integrated--buyer-supplier relationships

Horizontal -- using common resources

Emerging -- potential for vertical or horizontal linkages but not yet established.

Later two cluster types have greatest potential to benefit from economic development policies and interventions

Cluster Analysis Approach and Process

1. Identify clusters

Factor Analysis

Interviews with local economic development officials

2. Assess Clusters

Quantitative analysis:

to confirm importance (LQ),

identify industry mix and competitive shift effects,

potential for linkages (I-O Tables)

Focus Groups to identify nature and extent of firm inter-relationships, regional strengths and weaknesses, common needs and opportunities

3. Determine Outlook and Policy Options

What were the results of applying cluster analysis to Hudson Valley region?

Five key clusters identified:

Business Services, Information Technology, Tourism, Biomedical, Distribution?

What did they learn about the two case study clusters (Information Technology and Distribution)?

What was the resulting economic development agenda?