Regional Innovation Cluster and Economic Competitiveness

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México
What is Sintonía?

A regional competitiveness initiative that was formed by UPAEP in January 2012

• State competitiveness ranking in 2001 placed Puebla 28th out of 32 states, ten years later neighboring states move from the lower ranking to the top ten.
• Puebla is ranked fifth in terms of population. 5’383,133 inhabitants.
• Contributes 3.7% of the GDP
• 95% of economic organization rank of SME’s
Executive Committee and Director

Honorary Members

Council Members

Cluster Champions and Task forces

International Council

Honorary Members
The Journey up to now

*Sintonía’s Kickoff*
• Feb. 13th 2012

Convening Stakeholders
• 3 Conferences with International speakers
• Industry Workshops
• Plenary sessions

Clustering Workshops
• General sessions with all organizations
• Breakups by cluster
• cluster individual sessions
• Shared Value
In parallel

**Mexico and Puebla Mapping Project**

At Harvard, with Dr. Porter’s team, Rick Bryden, Niels Ketelhöhn, Alfonso Mendoza and Pablo Nuño

Cluster Map

**MOC Graduate Ph.D and M.S.**

- 55 students
- 46 decided to work their final cluster project related to Sintonía’s needs
- The students joined Sintonía groups
- Clusters are formed by business, government, universities, and MOC students

**Clustering workshops**

- General sessions with all organizations
- Breakups by cluster
- Several individual sessions by cluster
Competitiveness in Mexican States

Mexico GDP per Capita: $77,212

Source: INEGI. Sistema de Cuentas Nacionales de México.
Mexico Traded Cluster Specialization within NAFTA

Mexico Overall Share of NAFTA Traded Employment: 16.3%

Change in Mexico’s Share of NAFTA Employment, 2003 to 2008

Traded Cluster Composition of the Puebla Economy Employment

Overall change in the Puebla Share of Mexican Traded Employment: +0.09%

Puebla Overall Share of Mexican Traded Employment: 4.20%

Added Jobs
Lost Jobs

Employees 5,000 =

Puebla Cluster Portfolio, 2008

LQ, or Location Quotient, measures the state’s share in cluster employment relative to its overall share of Mexican employment. An LQ > 1 indicates an above average employment share in a cluster.
U.S. Goods Traded with Mexico billions USD

Source: Sintonía-UPAEP University, Puebla, México based on data from Office the United States Trade Representative, 2011
U.S. Services Traded with Mexico
(billions USD)

Source: Sintónia-UPAEP University, Puebla, México based on data from Office the United States Trade Representative, 2011
US Exports to México (billions USD)

Source: Sintonía-UPAEP University, Puebla, México based on data from Office the United States Trade Representative, 2011
U.S. exports of agricultural products to Mexico

Source: Sintonía-UPAEP University, Puebla, México based on data from Office the United States Trade Representative, 2011
The five largest México exports to US in 2011

Source: Sintonía-UPAEP University, Puebla, México based on data from Office the United States Trade Representative, 2011
México exports of agricultural products to US

Source: Sintonía-UPAEP University, Puebla, México based on data from Office the United States Trade Representative, 2011
México one of the open economies

Mexico has 42 free trade agreements.

Exports and imports as a percentage of GDP is:
- 58.6% in Mexico
- 18.5% in Brazil
- 51.7% in Canada
Competitiveness trend

Companies are beginning to set aside the outsourcing, and beginning to use near sourcing

China is losing competitiveness
Global Context Automotive Sector

Global Vehicle Production 2011: 75 million units (56 million are light vehicles), with global sales of USD 2400 billion.

**World Producer Market (2011)**
- Place: 8th

**World Export Market (2011)**
- Place: 5th

**World Producer Market**
- Total Production (2011): 2.55 million cars

**% Automotive World Production 2011 (Units)**
- China: 24%
- USA: 12%
- Japan: 11%
- Germany: 8%
- South Korea: 6%
- India: 5%
- Brazil: 5%
- Spain: 3%
- France: 3%
- Canada: 3%
- Mexico: 4%
- Rest: 16%

Source: MOC-UPAEP University, Puebla, México based on data from OICA
Mexico’s Automotive Sector

% Market Share by Brand Mexico (1Q 2012)

- NISSAN: 23.7%
- GENERAL MOTORS: 21.3%
- VOLKSWAGEN: 19.9%
- TOYOTA: 5%
- CHRYSLER: 9%
- FORD MOTOR: 9%
- HONDA: 4%
- MAZDA: 3%
- REST: 9%
- RENAULT: 3%

National Manufacturing GDP (2011)
- 20%

Employees (2011)
- Approx. 550,000

World’s leading OEMs assembly plant (2011)
- 8 companies producing light vehicles

Export Quantity (2011)
- 2.14 million cars

Growth
- Domestic Production (2011): 14.4%
- Domestic Mkt (2011): 10.4%

Source: MOC-UPAEP University, Puebla, México based on AMIA, Business Monitor International
Puebla’s Automotive share

State Manufacturing GDP (2011) 25.6%

Total export value (2011) USD$ 611 Million

Population (2011) 5th

Tier 1 purchasing share 2011

Puebla 39%

Rest of Mexico 61%

Puebla’s Automotive Cluster Map

Source: MOC-UPAEP University, Puebla, México.
VW de Mexico largest automotive plant in North America >403k during first 8 months of 2012
Puebla 115 companies in auto supply chain
Agricultural Products and Processed Food

World Exports of the clusters in 2010:
USD $ 1.12 Billions

World Exports by Subcluster 2010
- Others: 48%
- Vegetables and Fruits: 16%
- Meat and Related Products: 13%
- Grains: 7%
- Sugars, Molasses and Honey: 3%
- Packaged Cereal Foods: 2%
- Candy and Chocolate: 2%
- Spirits and Miscellaneous Fermented Beverages: 2%
- Metal and Glass Containers: 1%
- Paper Containers and Boxes: 1%
- Non-alcoholic Beverages: 1%
- Malt Beverages: 1%
- Miscellaneous Vegetable Materials: 0%

Export Value by Nation, 2010
- USA: $0.15
- Mexico: $0.12
- Netherlands: $0.10
- China: $0.09
- Brazil: $0.08
- Germany: $0.07
- France: $0.06
- Italy: $0.05
- Canada: $0.04
- Belgium: $0.04
- Argentina: $0.03
- Mexico: $0.01

Mexico: 1.64% of World Exports
Mexico Ranking: 18 | USD $ 18,471.23

Source: MOC-UPAEP University, Puebla, México based on data from Harvard
Sintonía cluster workshops
## Collaboration index

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Source: Sintonía-UPAEP University, Puebla, México.
Project detonator framework

Proyect Detonador

Definition

Diagnosis of the competitive situation

Description and assessment of the competitiveness factors
Diagnosing competitive position. (Porter Diamond)
Identification of national and international best practices (benchmarking)

Strategy Implementation

justification
Objectives
Schedule of activities
Financial and institutional responsibilities for its development.

Critical Success Factors

Performance indicators
goals in the short, medium and long term

Articulation

Collaboration Index

Source: L.B.Murphy, Sintonía-UPAEP University, Puebla, México.
Articulation-Sintonía

- Global competitiveness
- Shift interest
- Agreement
- Consistent attendance
- Project Detonator
- Relevant talent development
- Increase revenue
- Increased health outcomes
- Industry demand driven education
- Environmental impacts

Source: L.B.Murphy, Sintonía-UPAEP University, Puebla, México.
**Project:** Collaboration between the private sector in response to 14 catastrophic sickness through Seguro Popular

**Cluster Coordinator:** Luis Miguel Perez – H. Christus Muguerza

**Status of the project:** Cooperating private and public hospitals.

**Stakeholder:**
- Exacta
- H. Christus Muguerza Beneficencia Española
- Secretaria de Salud Hospital Puebla Recovery Páez
- Radiología Diagnóstico Clínico. Unidad Médica La Ioma
- Secretaría del Estado de prevención de discapacidad Centro Medico Quirúrgico.

Source: Sintonía-UPAEP University, Puebla, México.
**Project:** Develop a matrix that allows an easy access to credits, and develop a new model of business plan.

**Cluster Coordinator:** Gonzalo Hortega - VWFS

**Status of the project:** Research information of credit supply of 10 banking institutions

**Stakeholder:**
- Banco del Bajío
- Bancomer
- Nacional Financiera
- Bancomer
- HSBC
- Nafinsa

Source: Sintonía-UPAEP University, Puebla, México.
Pilot project detonator of tourism

Shared Value–Anchor Strategy.

Africam