

EWA Webinar Special Series

Counteracting the Effects of the Coronavirus upon Global Businesses

Part 2: Disruption in China is Driving Business Expansion into Mexico

April 8, 2020

east  **west**®

a s s o c i a t e s

DRIVING COMPANY GROWTH IN CHINA, ASIA, MEXICO & CEE

- A leading provider of commercial, operational & risk management solutions and detailed implementation to western companies competing in the ever-changing China, Asia, Mexico & Central Eastern European markets
- Founded in 2005, with executives in China, Asia, Mexico & Central Eastern Europe
- All EWA executives have held senior management positions with P&L responsibilities for western MNCs, including Briggs & Stratton (NYSE: BGG), Bechtel Corporation and Littelfuse, Inc. (NASDAQ: LFUS)
- Extensive experience in numerous key industries:

Automotive	General Manufacturing	Durable Goods
Metal Fabrication	Consumer Goods	Filtration & Separation
Chemicals	Packaging	Electronics
Semiconductors	Food & Beverage	Medical Devices
Specialty Metals	Laboratory Equipment	Food Technology
Energy & Natural Gas	Industrial Textile & Apparel	Costings & Building Materials

Strategic Business
Planning

Manufacturing
Footprint
Optimization

Supply Chain
Optimization

Performance
Improvement

HR & Executive
Recruiting

Risk Management

M&A Due Diligence

Business
Assessment

Research Services



ALEX BRYANT
Founder & President



DAN MCLEOD
Director



MARK PLUM
Director

- Mexico like many countries has its own set of specific issues and concerns
 - * Personal Safety Concerns
 - * Potential transparencies issues
 - * Local Corruption
- EWA “in country” Mexico team members have over 75 years of expertise in working with local authorities and are very familiar with navigating specific issues associated with conducting business in Mexico

For the last 20 years, western companies have invested heavily in China to capitalize upon low production costs and the enormous domestic market potential. But many of the businesses advantages in China have diminished, due to:

- Increased domestic competition
- Slowing domestic economy
- Rising labor costs in China
- US-China trade tariffs

ECONOMIC DISRUPTION

And with the outbreak of the Coronavirus:

OPERATIONAL & ECONOMIC DISRUPTION

- The Coronavirus has highlighted companies' dependency upon China and the need for greater diversification in their manufacturing footprints and supply chains as the foundation for long-term stability.

RISK DIVERSIFICATION

- But the establishment of a new manufacturing facility, new assembly operation or new supply chain, is often a costly undertaking. The selection of the right global location should also include additional long-term advantages.

COST REDUCTION & GROWTH DEVELOPMENT

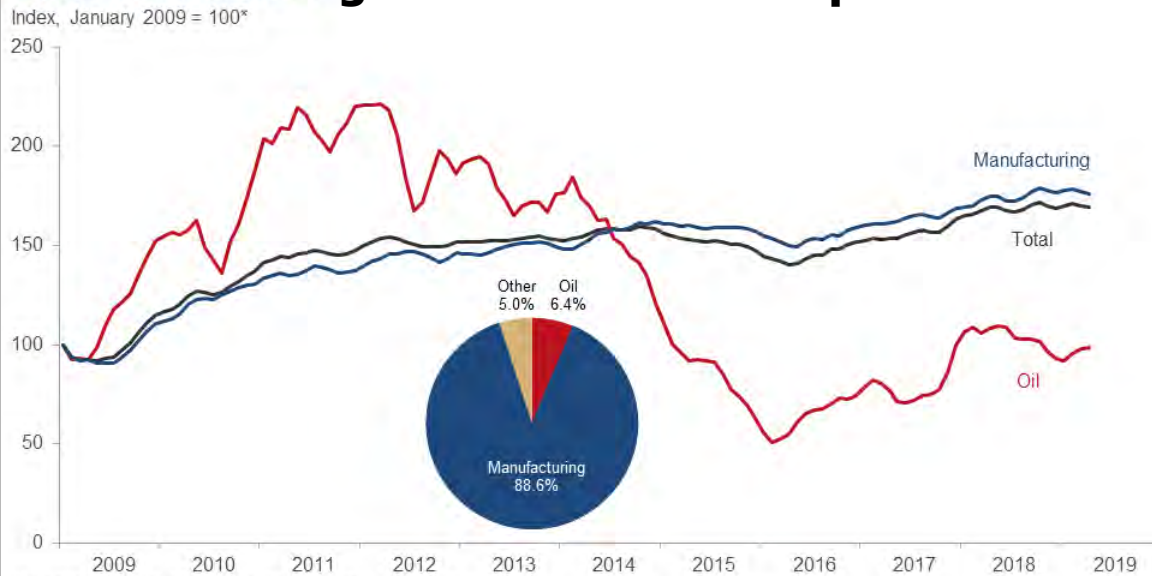
The Time is Right to Explore Mexico

- Today's presentation is divided into 3 sections:
 - A detailed overview of the advantages of doing business in Mexico
 - A detailed explanation of what is required to ensure the development of a successful global expansion strategy & disruption-free implementation
 - 2 working example case studies
 - Establishment of a Mexican operation with local supply chains
 - Development & implementation of a supply chain in Mexico

“Over the last 40 years, Mexico has transformed its economy from one dominated by oil and other commodities into a major manufacturing powerhouse. Today, the ratio of its exports to gross domestic product tops 39 percent — more than twice China’s.”

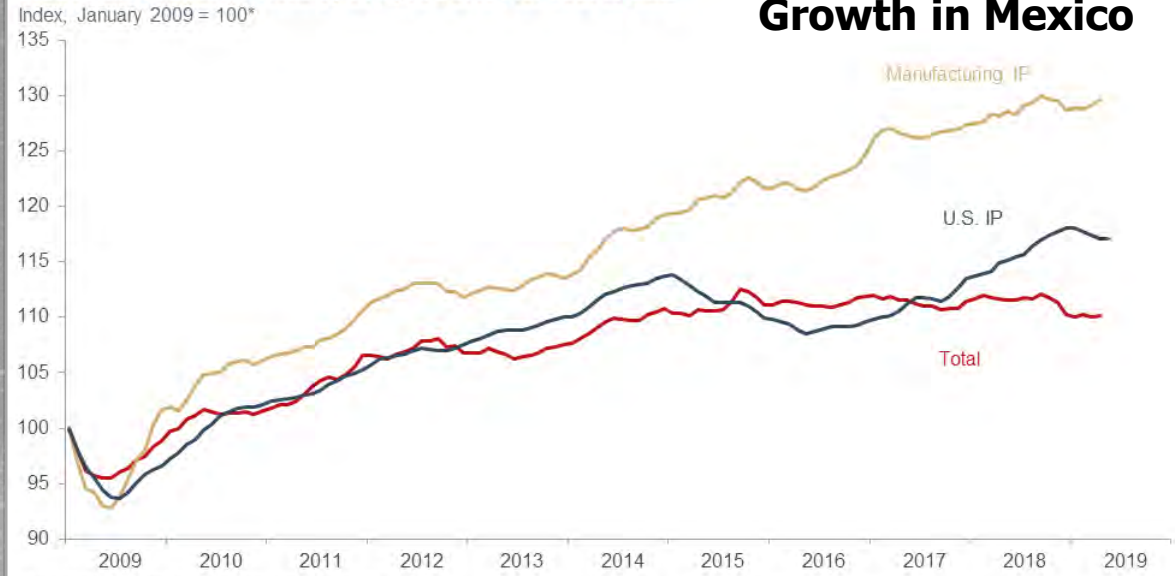
Bloomberg News, 2020

Manufacturing Drives Mexico's Export Growth

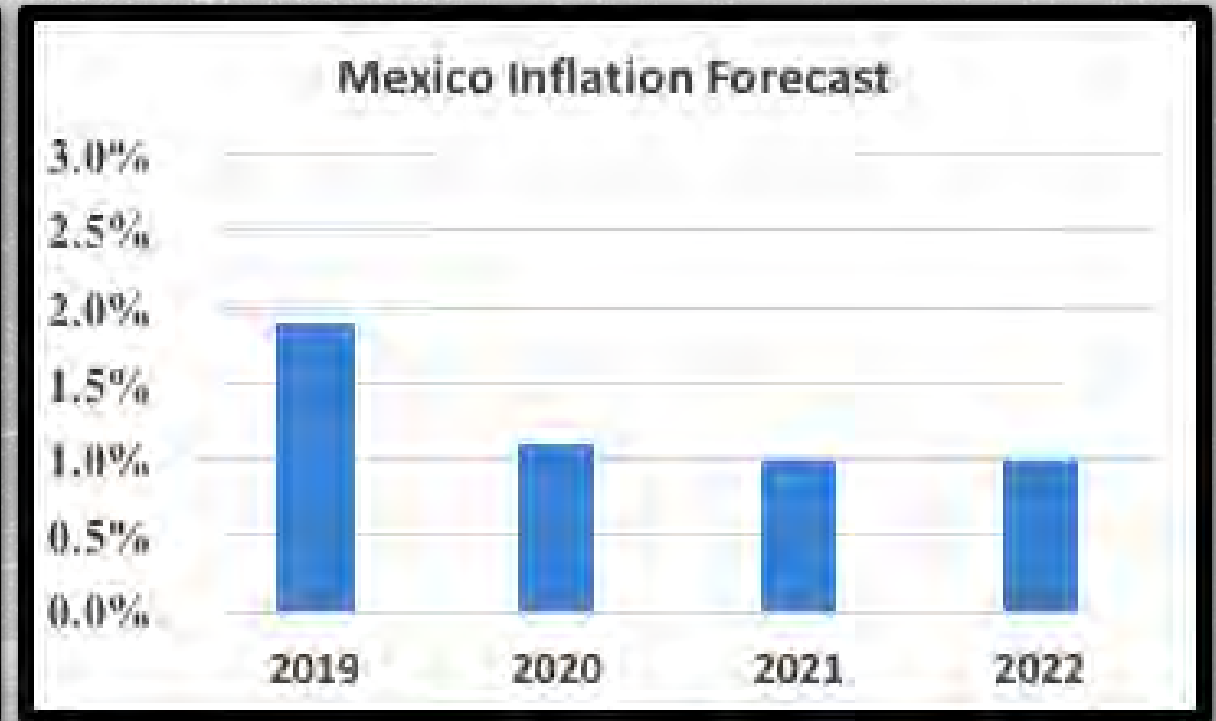
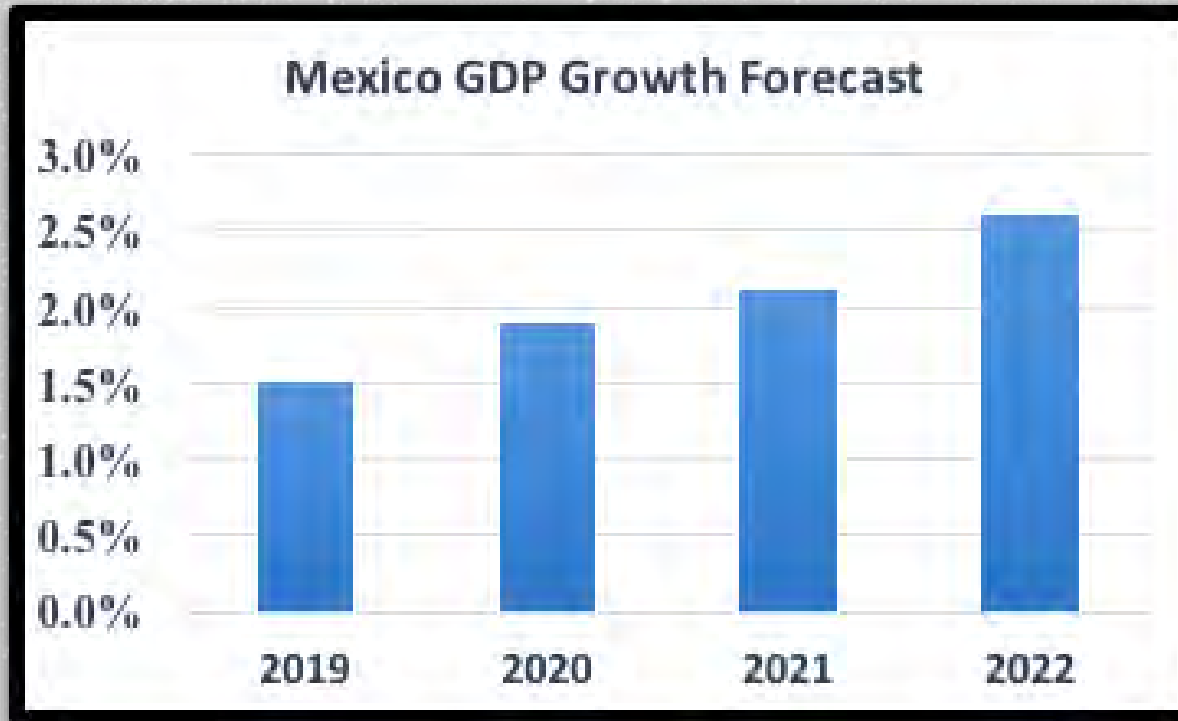


*Seasonally adjusted, three-month moving average; real dollars.
 NOTES: All data are through April 2019. The pie chart reflects the share of total exports year to date in 2019.
 SOURCE: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography).

Manufacturing Industrial Production Pushes Market Growth in Mexico



*Seasonally adjusted, three-month moving average.
 NOTES: Data for Mexico's manufacturing and total industrial production (IP) are through April 2019. Data for U.S. IP are through May 2019.
 SOURCES: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography); Federal Reserve Board



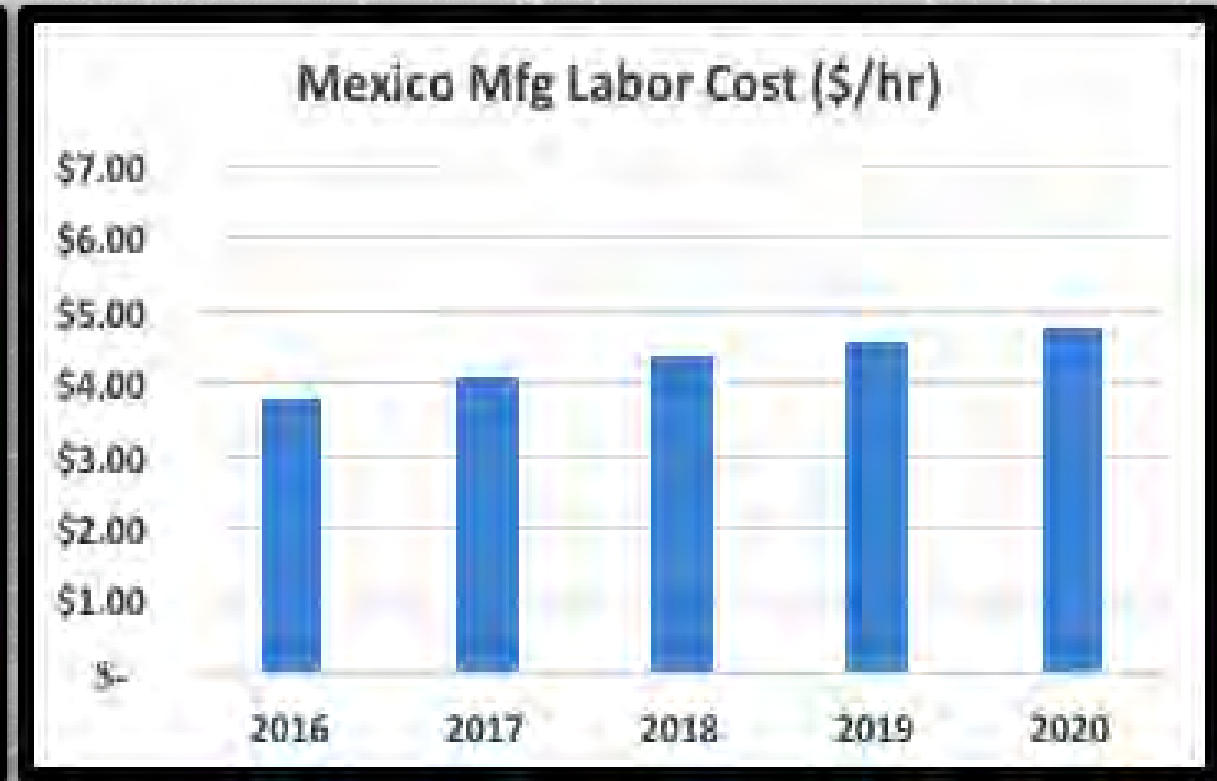
Source: IMF 2019



Source: IMF 2019

Financial Advantages of Doing Business in Mexico

Manufacturing Labor Costs / Hour: China vs. Mexico



Source: Statista 2020



Source: Statista 2020

Manufacturing in Mexico vs. China - The Cost Difference

20%
lower
employee
wages costs
in Mexico

20%
lower
industrial lease
space costs in
Mexico

70%
lower
transportation
costs to the
USA in Mexico

4%
lower
electricity
costs in
Mexico

60%
lower
natural gas
costs in
Mexico

Source: JP Morgan Chase 2019

20%
lower
employee

20%
lower
industrial lease

70%
lower
transportation

**Lower operating costs that also apply to
the supply chains in Mexico**

lower
electricity
costs in
Mexico

lower
natural gas
costs in
Mexico

Source: JP Morgan Chase 2019

Operational Advantages of Doing Business in Mexico

1. Aerospace

Aerospace manufacturing makes up nearly half of foreign direct investment in Mexico. There are approx. 300 aerospace manufacturing companies, including OEMs, Tier 1, 2, and 3 suppliers operating Mexico.

2. Automotive

The Mexican automotive industry is the fourth largest exporter of auto parts in the world and first in auto exports to the United States. Ten automotive OEMs have established a presence in Mexico and consistently work with tiered supplier networks to enhance productivity and export functions.

3. Medical Devices

Mexico's medical device industry manufactures a range of products from nearly 650 companies that export about USD 8 billion altogether. The vast majority of those products (92 %) head to the United States.

4. Electronics

Mexico specializes in manufacturing aerospace, hi-tech, IT, electronic sub-assembly parts, computer parts, home appliances and consumer goods.

5. Appliance Manufacturing and Furniture Manufacturing

Mexico is the fifth-largest exporter of appliances in the world, and a significant exporter within the furniture and household manufacturing industry.



- Mexico's manufacturing industry is concentrated within the "green zone"
- Availability of investment incentives managed at the state level, with competition between states
- Clustering of manufacturing is driven by the individual needs and specializations of the varying manufacturing industries
- Clustering also ensures the needed labor skills & labor supply in each industry cluster region

Aerospace

Operate out of industrial clusters concentrated in Queretaro, Sonora, Chihuahua, Nuevo Leon, and Baja California. Queretaro, home to the largest aerospace cluster, draws support from local university partnerships with Bombardier.

Automotive

Automotive manufacturing companies in Mexico have established a presence in every corner of the country, but are primarily clustered around Coahuila, San Luis Potosí, Baja California, Sonora, Nuevo León, Queretaro, Jalisco, and Guanajuato.

Medical Devices

The largest cluster can be found in Baja California, with 67 medical device companies, followed by Chihuahua, Coahuila, Nuevo León, Jalisco, Sonora, and Tamaulipas.

Electronics

The industry's activity concentrated in Coahuila, Mexico City, Nuevo León, Querétaro, and Tamaulipas. The regions also specialize in automotive and telecommunications components.

Appliance Manufacturing and Furniture Manufacturing

Queretaro, Tecate, Guadalajara, Monterrey, and Saltillo are particularly attractive for both furniture and appliance manufacturing in Mexico.

Aerospace

Operate out of industrial clusters concentrated in Queretaro, Sonora, Chihuahua, Nuevo Leon, and Baja California. Queretaro, home to the largest aerospace cluster, draws support from local university partnerships with Bombardier.

Automotive

Automotive manufacturing companies in Mexico have established a presence in various corners of the country, but are concentrated in Jalisco, Queretaro, and Chihuahua.

Medical

The largest medical device manufacturing clusters are in Chihuahua and Queretaro.

Electronics

The industry's activity concentrated in Coahuila, Mexico City, Nuevo León, Querétaro, and Tamaulipas. The regions also specialize in automotive and telecommunications components.

Appliance Manufacturing and Furniture Manufacturing

Queretaro, Tecate, Guadalajara, Monterrey, and Saltillo are particularly attractive for both furniture and appliance manufacturing in Mexico.

Industry clustering ensures proximity to relevant suppliers & ample supply of labor force with the right skills

Mexico's Highway Infrastructure

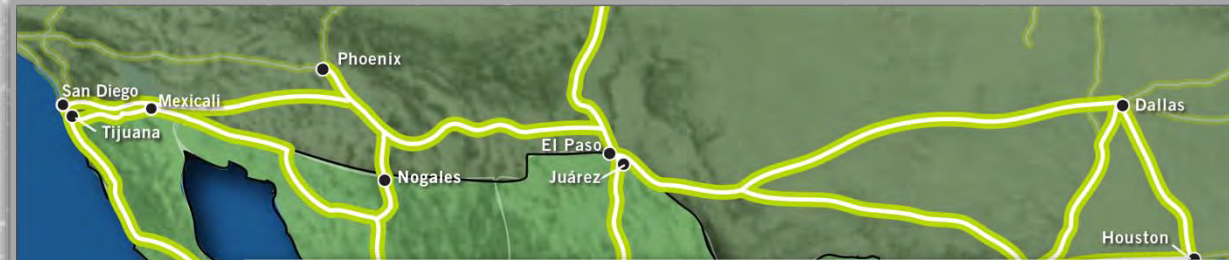


Mexico's Port Infrastructure

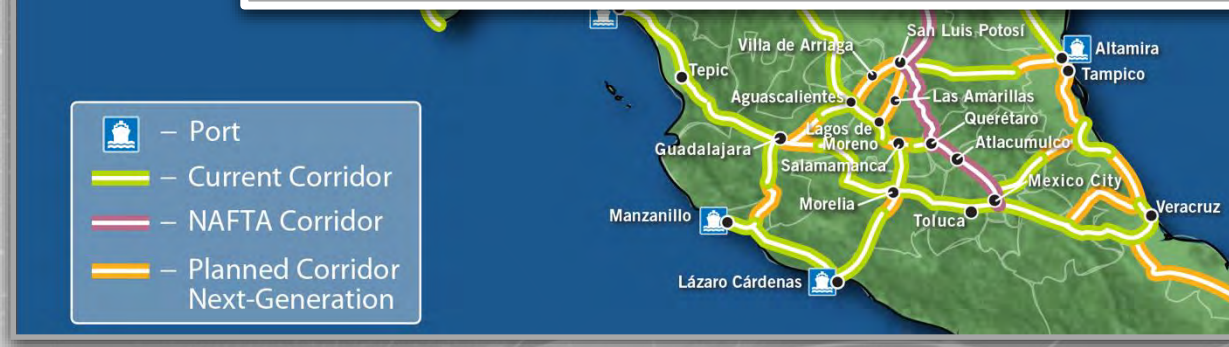


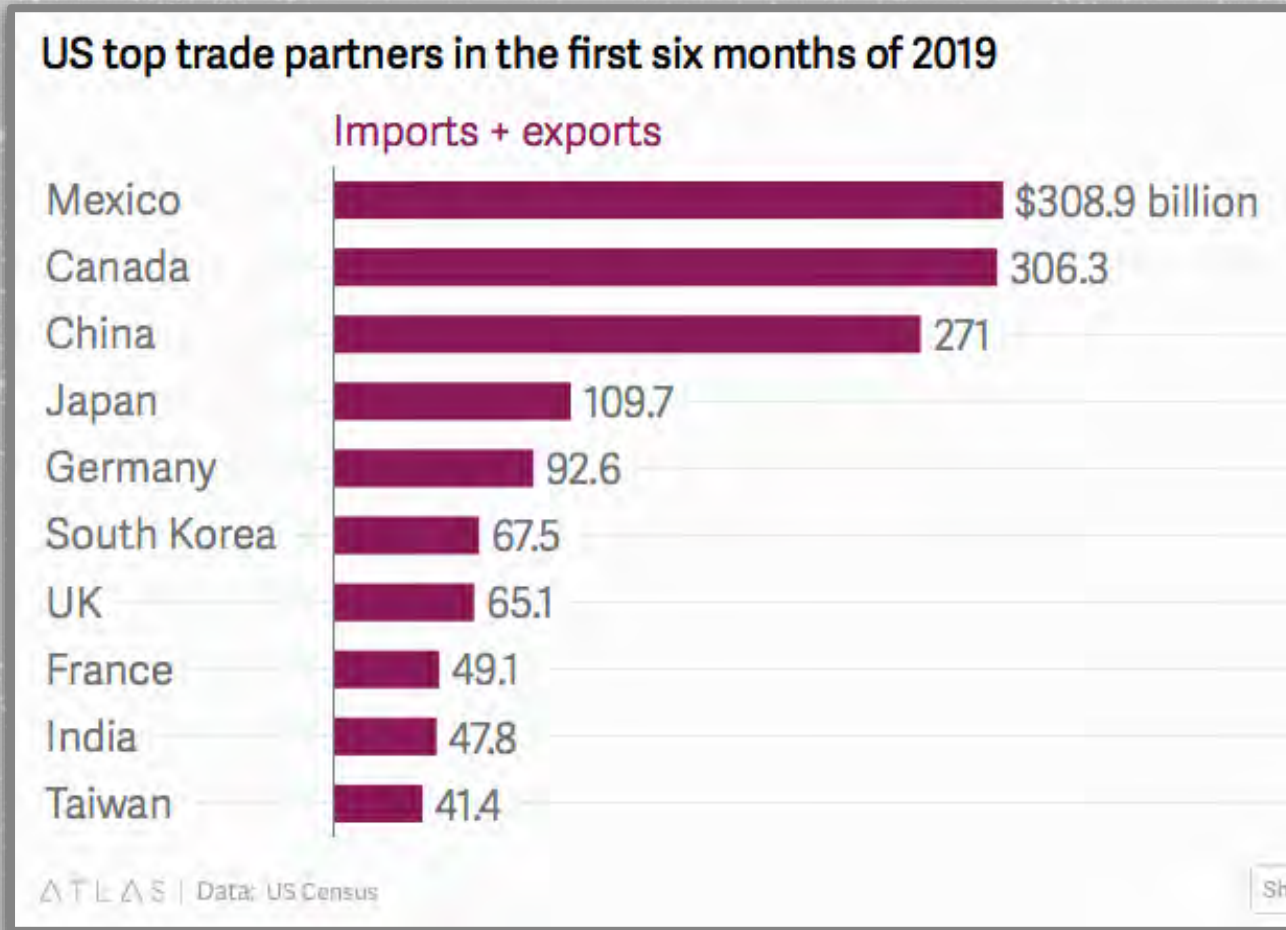
Mexico's Highway Infrastructure

Mexico's Port Infrastructure



Connects all manufacturing clusters and provides direct access to the Atlantic & Pacific oceans and the USA to drive logistics efficiency



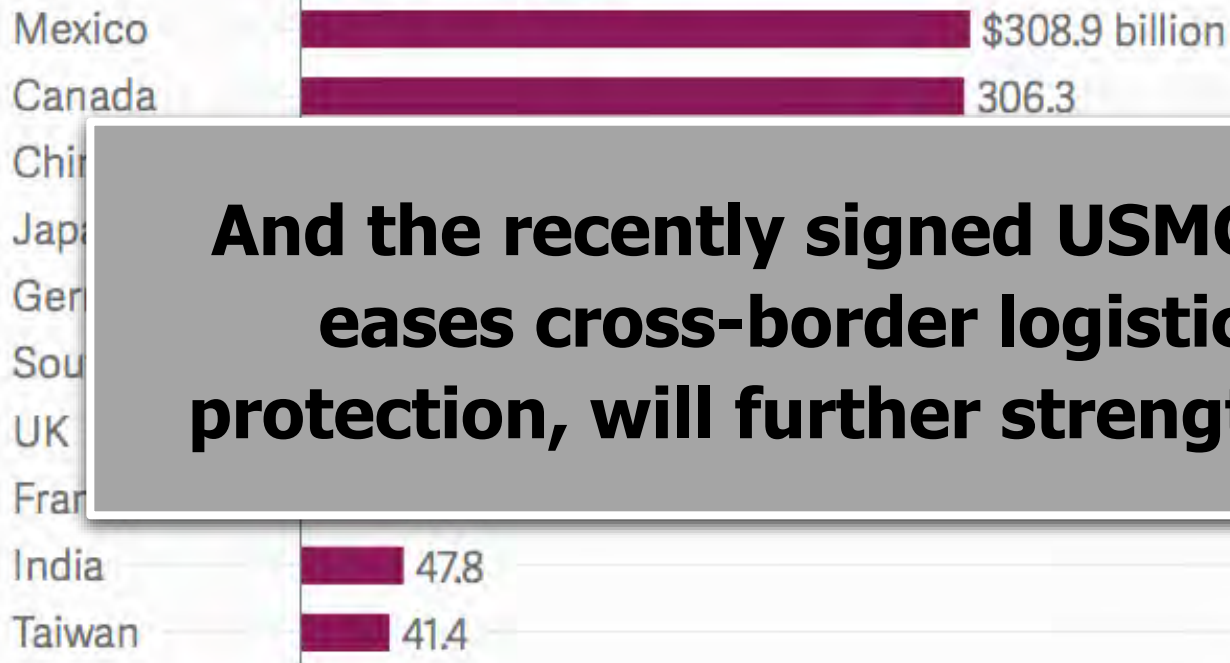


The United States is also Mexico's largest trade partner:

- **76.5 %** of Mexico's exports were sent just north of the border to the U.S. in 2019

US top trade partners in the first six months of 2019

Imports + exports



The United States is also Mexico's largest trade partner:
• **76.5 %** of Mexico's exports were sent just north of the

And the recently signed USMCA trade deal, which also eases cross-border logistics & ensures better IP protection, will further strengthen the US-Mexico trade

Mexico in a Nutshell

- Growing economy with a strong economic outlook
- Highly skilled and available labor force
- Well established & highly diversified manufacturing powerhouse with solid supply chains
- Significantly lower manufacturing costs than in China
- #1 trading partner relationship with the USA
- Eased cross-boarder logistics & improved IP protection via USMCA trade agreement
- Expansive & growing transportation infrastructure with access to both Atlantic & Pacific oceans

Mexico in a Nutshell

- Growing economy with a strong economic outlook

Risk Diversification
Cost Reduction
Growth Development

- #1 trading partner relationship with the USA
- Eased cross-border logistics & improved IP protection via USMCA trade agreement
- Expansive & growing transportation infrastructure with access to both Atlantic & Pacific oceans

EWA Global Expansion Process

5 step process developed upon 2 core principles:

To be successful, strategies must be company specific & comprehensive

To prevent disruption to company operations, implementation must be seamless

Step 1: Strategic Assessment of Client's Business

Operations

- Current Manufacturing Footprint
 - Processes and Products
 - Forecasted Production/Capacity Constraints
 - Manufacturing Costs/Structure
 - IP Control Risk
- Financial Priorities/Constraints
 - Own or Lease Facilities
 - Capital Constraints
 - Inventories
- Operating Environment
 - Supportive Local Govt/Ease of Doing Business
 - Do they have current/existing Incentives in the US or china or wherever they are?
 - Physical security for assets & law enforcement

Supply Chain

- Global supply chain business model
- Local sourced or imported
- Make vs Buy
- Location of Key Suppliers
- Logistics/Warehousing – costs, locations, use of 3PL
- Exposure to Tariffs/Trade Policies
- Quality control procedures on existing vendors and prospective vendors

Customer Base

- Where are the customers currently located
- Domestic, export, both
- Logistics from existing plant to their customer
- Duties and other potential barriers
- Understand realistic accessible markets
- Projected growth areas for customers in next 1-3 years

Step 2: Strategic Assessment of Client & Prospective Country / Countries

Operations

- Client Fit
 - Industry Clusters
 - Supplier Base
 - Industrial Zones
- Ease of Doing Business
 - License and Permits
 - Investment Incentives
 - Transparency and Corruption
 - Security and IP Risk
- Factory Set Up
 - Availability/Cost of Land and Utilities
 - Availability of A&E Firms, Contractors
 - Availability/Cost of Leased Properties
- Labor Supply, Quality of available Employees, labor Costs

Supply Chain

- Availability of raw materials & components
- Established supplier base
- Logistics availability
 - Domestic and Export Transportation Costs
 - Import/Export Efficiency
 - Established 3PL Providers
 - Export incentives
- Depth and capacity of suppliers
- Duty and Tariff Structure

Customer Base

- Domestic market size & growth potential
- Competitive landscape
- Global trade agreements
- Proximity to existing customer base
- Relevance of adjacent industry verticals
- Size of adjacent export markets

Each strategic assessment is completed independently of the other **AND** combined with each other

Step 3: Development of Expansion Strategy

Operations

- Operating Model
 - Contract Manufacture
 - Source Components and Assemble
 - Full Manufacturing Operation
- Property Type
 - Lease/Fit-Out Existing Building
 - Build-to-Suit and Lease Back
 - Design/Build New Factory
- Non-Manufacturing Options
 - Shared Service Center
 - Design/Applications Center
 - Distribution Warehouse

Supply Chain

- Import vs Local Sourcing Recommendations
- Make vs. Buy Analysis
- Analysis of local content strategy
- Logistics Services and Costs
- IP Protection Strategy

Customer Base

- Size and availability of domestic & regional customers
- Market entry and sales channels to domestic & regional customers
- Existing competitors
- Servicing adjacent verticals
- Evaluate sales strategies with new cost structures
- Sales strategy and required sales personnel

Discipline specific **AND** company comprehensive

Step 4: On The Ground Negotiations & Interactions

Operations

- Negotiate incentive package with appropriate government agencies, including Board of Investment
- Negotiate land or lease cost with industrial parks, property developers, real estate firms
- Identify and qualify A&E firms, construction contractors
- Identify and qualify legal, accounting, HR services firms
- Non competitor discussions
- Discussions with AmCham, US Consulate & Trade Associations

Supply Chain

- Identify and preliminarily qualify suppliers
- Identify and qualify Logistics Services providers
- Meeting with Customs and government agencies regarding transportation and import/export regulations

Customer Base

- Discussions with existing customers
- Identify potential customers
- Understand product adaptation requirements
- Meetings with distributors and market entry channels
- Identify hiring requirements for sales personnel

Step 5: Hands-On Implementation

Operations

- Manage design/construction of new factory or fit out of existing leased space
 - Build or fit out Factory
 - Equipment sourcing and installation
 - Commissioning and Startup
- Recruit and hire staff
- Obtaining business license and permits
- Finalize all incentive packages
- Finalize back office strategy (in house or outsourced)

Supply Chain

- Due diligence on top 10 suppliers
- Initial testing and sample reviews
- Select logistics partners
- Complete all commercial contracts with logistic providers, distributors, etc.

Customer Base

- Qualify potential customers
- Implement sales strategy for domestic & regional customer base, including update sales plans with new cost structure and location
- Update product specifications and adaptations if necessary
- Preliminary customer factory visits
- Qualifying & hiring sales personnel

EWA Global Expansion into Mexico Case Studies

Establishment of a Mexican operation with local supply chains

Development & implementation of a supply chain in Mexico



Case Study #1

Establishment of a Mexican operation with local supply chains

- A Michigan-based manufacturer of automotive components had been sourcing materials from China and assembling finished products in China for sale into Mexico & USA since the early 2000's. Due to escalating labor costs, growing compliance complexity, US-China trade tariffs and increased logistics costs, company profits had significantly decreased.
- As part of an initiative to decrease dependency upon China and increase operational profitability, EWA had suggested Mexico as an alternative location to expand their manufacturing and supply chain footprints and decrease their dependence on China.
- EWA was engaged to develop a Mexican expansion strategic recommendation for their Board of Director's evaluation and potential implementation plan.

Step 1: Assessment of Client's Business

- Company had a leased assembly operation in China which had one year left on their 15 year lease
- Operation was well-run and had a good management team. Assembly operation costs were in-line with other assembly plants in the Nanjing area
- Suppliers were local Chinese vendors qualified by the manufacturer, whose performance had been good with on-time deliveries, limited product failures and execution of cost reductions measures on an annual basis.
- Supplier costs had increased in the prior 3 years and 25% tariffs were placed on the imported products to the US
- The long shipping times from China had resulted in delays for some US Customers

Step 2: Assessment of Mexico as a fit for the client

- EWA found available existing manufacturing space for either a full manufacturing plant or leased assembly operation
- Costs associated with the factory start up were in line with the EWA projected budget and less than the China industrial space
- The permitting process and government regulations to establish an operation were complicated but EWA had addressed them in prior manufacturing projects
- We evaluated a number of Mexican automotive suppliers and confirmed the availability & capacity – always an issue
- Imports of finished goods from Mexico into the US avoided the US/China tariffs
- Delivery to US customers would be improved

Step 3: Development of Expansion Strategy

- Based on our Assessment in Step 1 and Step 2, EWA recommended the establishment of a Mexican assembly operation supported by a local supply chain base.
- The costs associated with the assembly operation were more in line with the US manufacturer
- The company was not comfortable establishing a full manufacturing plant as their first investment in Mexico
- The assembly operation was recommended because we identified available sites for a leased operation with warehousing
- The local Mexican suppliers were available at similar pricing as the Chinese suppliers
- Establishment of an assembly operation would ensure US customers received their products much faster than delivery from China
- EWA submitted a detailed recommendation for a Mexican assembly operation with a projected budget to the corporate executives, who reviewed with their Board of Directors.
- Board approved the recommendation

Step 4: On the Ground Negotiation and Evaluation

- Negotiations with industrial park managers & property developers
- Site selection for assembly operation
- Finalization of site leasing agreement
- On-site audits/assessments and client visits of short-listed suppliers
- Arrange for client visits to suppliers
- Finalize selection following meetings with the suppliers

Step 5: Hands-On Implementation

- Development of budget & timetable for setup of the new operation
- Coordination of prototypes and qualification with selected suppliers
- Establish legal license for assembly operation
- Arranged for transport & setup of client's assembly equipment at the new site
- Assisted with commissioning & startup at the new site
- Hiring and training of personnel
- Establishment of procedures for inventory management, order expediting, quality control, etc.

- Nearly all of the company's spend on parts could be reallocated to Mexican suppliers at competitive costs. EWA identified and qualified multiple suppliers that could meet the technical, cost, and capacity requirements. Savings estimates for the first year of operation were:
 - **Profit improvement of \$2.5M annually from reduced logistics and tariff costs**
 - **Inventory reduction of \$1.5 M**
 - **Delivery times reduced from 9 weeks to 3 weeks**
- EWA completed the closure of the China operation

Case Study #2

Development & implementation of a supply chain and logistics strategy in Mexico

- An Pennsylvania-based supplier of upscale kitchenware was sourcing utensils and cookware from Guangdong, in southern China.
- The company had established an extensive supply chain in China. Nearly 80% of its product was sourced there, supported by engineers and quality assurance staff in China. The products were shipped to the US for warehousing and final shipment to customers.
- The introduction of tariffs added a \$8MM cost to continuing to supply from China
- Decision was made to evaluate relocation of production to Mexico to reduce cost, reduce inventories, and lessen dependence upon China.

Step 1: Assessment of Client's Business

- Extensive interviews with senior management and project technical team to gain understanding of
 - Overall company background and objectives for the project
 - Understand products, manufacturing processes and cost breakdown.
- Volume requirements, growth plans
- Develop a strong working relationship and communications

Step 2: Assessment of Mexico as a fit for the client

- Identify suitable regions to target based on
 - Established supplier base –casting, stamping, coating, enameling, wire bending, etc
 - Security/Ease of access from US for client's engineers and QA staff
 - Logistics/Connectivity to US border
 - Availability of skilled labor, labor stability
- Identify potential partners/suppliers
 - Desktop research, EWA experience in the region, trade associations
- Selected Monterrey as focus area

Step 3: Development of Expansion Strategy

- Identified products to be sourced in Mexico
 - Focus on higher volume, to reduce complexity of transition
 - Target 20% of China spend as first step
- Define required supplier capabilities/scope of services
 - Stamping
 - Aluminum Casting
 - Powder Coating
 - Enameling
 - Plating
- Capability to provide
 - Warehousing/Stocking
 - Shipping and Customs Clearance
- Interviews to develop “short list” of suppliers
- Develop RFP for products and services

Step 4: On the Ground Negotiation and Evaluation

- Issue RFPs to short list of 12 suppliers
- Bidders required to provide extensive, detailed project proposals with:
 - Projected unit costs
 - Quality Control plans
 - Lead times/forecasting requirements
 - Warrantee/Failure Policies
- EWA audit of supplier's operations, focusing on
 - Material planning systems
 - Quality Management
 - Production equipment and Processes
 - Shop Floor management
 - Customer Service
 - EHS Compliance
 - Reputational Due Diligence
- Selected three suppliers to recommend

Step 5: Hands-On Implementation

- Arranged visit to suppliers for Client approval
- Completed contract negotiations with suppliers
 - Initial unit manufacturing cost, payment terms, and projected productivity improvements
 - Productivity commitments/price breaks for increased volume
 - Inventory holding/stocking
 - Monitor and expedite deliveries from suppliers (minimize language difficulties)
- Facilitated establishing Project team to manage the transition
- Worked with client to supply tooling from China to reduce cost and increase speed to set up

• Outsourced Product Lines to Mexico

- Product quality acceptable based on 3-month evaluation process
- Lead times improved....reduced 6 weeks transit time
- Cost reduced \$0.4M vs sourcing from USA, with potential for additional reductions as volume grows
- Inventories reduced by 30% vs supply from China (\$1.4M cash)
- Response to demand changes improved
- Reduced tariff impact

PART 1

Tactical Rapid Response Measures to Mitigate the Impact of the Coronavirus upon Global Businesses

The first webinar focussed on tactical and operational measures to combat the business impacts of the Coronavirus: alternative global sourcing (Mexico & Asia), contract manufacturing & assembly operations (Mexico & Asia) and interim general management (China & Asia).

April 1, 2020

Click here to download:

<https://eastwestassoc.com/webinars/>

PART 3

Risk Diversification to Combat the Coronavirus: Doing Business in Thailand, Vietnam & the Philippines

The third webinar will explain the advantages of doing business in Thailand, Vietnam & the Philippines and processes of expanding manufacturing operations and supply chains into Asia.

April 22, 2020 / 11 AM EST

Click here to register:

<https://register.gotowebinar.com/register/743331838682252556>

Contact Information

For further information as to how East West Associates can improve your business, please contact:

Alex Bryant
President

Charlotte, NC, USA

abryant@eastwestassoc.com

Direct +1.704.807.9531

Jon B. Anderson

VP & Managing Director – China


Shanghai, PRC


janderson@eastwestassoc.com

World Mobile +1.312.952.8255

China +86 137 6434 7001

 eastwestassoc.com

 [linkedin.com/company/east-west-associates](https://www.linkedin.com/company/east-west-associates)

 twitter.com/abryanteast