

PRODENSA



Nearshoring your Supply Chain to Mexico



Prodensa Insights

Objective: to engage and inform a Sr. Supply Chain professional on the opportunities and challenges of nearshoring to Mexico.

Prodensa is a Mexican advisory and project management firm with more than 35 years of experience supporting start up projects in Mexico – through strategic advisory and hands-on support. This E-Book serves as a guide reference for professionals conducting project management, due diligence, corporate planning, among others. Its purpose is to expand the understanding of opportunities for supply chain development in Mexico as part of an overall nearshoring strategy. Additional support for research, site selection or cash flow analysis can be provided to support your new venture. Over 1000 international corporations have trusted their Mexican operations to our local experts.

Disclaimer: this report is not legally binding nor complete in all contexts. The reader at all times is solely responsible for the application of the information shared herein

Contents

I. The Nearshoring Phenomenon

Summarizing the impacts of nearshoring from Prodensa's point view supporting multinational organizations.

II. Mexico Supply Chain Development

Taking a look at the opportunities for supply chains in Mexico, where they excel and why.

III. Prodensa Recommendations

Revealing our advice for beginning or advancing supply chain relocations analysis, the do's and don'ts.

The Nearshoring Phenomenon

The North American Way

The nearshoring phenomenon often refers to the trend of companies moving their production or service activities to places that are closer to their home market, often in the same or neighboring time zone.

Nearshoring is often driven by several factors, including rising labor costs in traditional offshore locations, as well as geopolitical risks and challenges associated with managing supply chains across multiple time zones and cultures. Additionally, nearshoring can offer advantages such as shorter lead times, faster delivery, and increased flexibility. This helps companies respond to changing market demands and trends.

Companies are pushing hard to build resilience into their supply chains via a post-pandemic regionalization trend. Moving production closer to home is a way to mitigate some of those risks. The benefits to North America make it a welcome trend.

The US-Mexico Foundation's first "North Capital Forum" brought together thought leaders with an aligned mission - to communicate the "tremendous opportunity and urgent need to consolidate North America as the most competitive region of the world". Emilio Cadena, Chairman of the US-Mexico Foundation, helped put together an event to showcase North America's potential.

Cadena argues that the catalyst for regional competitiveness is the self-determination to make the highest quality of goods and services that the people of North America deserve. The idea is not to win an adversarial race against other regional economies, but to constantly drive our own quality expectations through the roof and raise the bar on what 'Made in North America' signifies.

Collaboration is what makes the region strong. The United States, Canada and Mexico share a population of 500 million people, a GDP of nearly \$30 trillion dollars, and each alone are important global economies. 1 of every 17 U.S. jobs is supported by trade with Canada and Mexico.



"The North American Way is not something that grew out of government, but from collaboration between building things together."

Emilio Cadena
CEO

Nearshoring can benefit a variety of stakeholders.



Companies.

It can help them reduce costs, increase efficiency, improve the quality of their products or services. Improve communication, collaboration, turnaround times and customer service.



Suppliers.

By localizing manufacturing supply chains, regional service providers and vendors benefit from increased business opportunities and access to new markets.



Employees.

Nearshoring can create new job opportunities for employees in both the home country and the host country. Localizing jobs to the same region supports increased jobs in other parts of the local economies.



Governments.

Nearshoring brings increased investment, job creation and tax revenue to the region. Additionally, it promotes trade and economic integration between neighboring countries. That can help to strengthen regional economies.

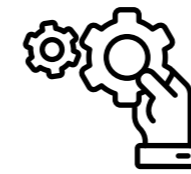


Across many industries, there are growing needs to protect critical supply chains by enabling closer supply chain coordination among allies and partners. Experts have called it "ally shoring", or sourcing essential goods and services with countries that share democratic values and a commitment to open, rules-based international order.

Nearshoring to North America can have great impacts in our local economies and communities.

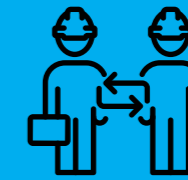
Kurt Schmidt, Prodensa's Consulting Director, advises clients on their re-localization strategies, particularly those related to Nearshoring their operations close to their client's consumer markets and Supply Chain Diversification.

According to Kurt, Nearshoring the Operations and Supply Chains, are closely tied to Business Continuity, Risk Mitigations and Business Performance as trade laws have shifted over time. The advantages of nearshoring are directly reflected in business outcomes, with key benefits including:



LABOR RATES.

Manufacturing companies that are labor-intensive place a high importance on hiring and training their workforce. For many clients, returning operations to their home country is not cost-beneficial. Driven by a high reliance on labor costs, many clients are considering Mexico with an abundant supply of assembly workforce.



LABOR CULTURE.

When communication is key, many clients feel the labor culture in their overseas facility is not in line with their corporate operation. Being able to visit, supervise and interact with their workforce is a growing requirement for many clients. It fosters company culture that many times leads to innovation.



TIME ZONES.

Proximity has been a key driver and benefit for nearshoring manufacturing operations. Clients can improve their forecast, lead times and logistics. Consumer trends are constantly changing. Working in sync with their manufacturing facility is a game changer for agile and growing clients who need to improve supply chain accuracy and cash flow.



FREE TRADE AGREEMENTS.

For the last few years we have seen growing interest in supply chain development and regionalization. We have partnered with associations aimed at connecting and developing critical supply chains in North America. We have seen many companies urge their key suppliers to nearshore and invest in North America as a growing push to conduct business in a singular region and system.

We see clients transitioning their manufacturing footprint from overseas to get closer to their consumer markets. Nearshoring your operations comes with challenges, exploring other countries and cultures is at times, overwhelming. We strongly recommend that you evaluate the options and Feasibility of your business in order to make informed decisions.

Kurt Schmidt
Consulting Director



Mexican Supply Chain Development.

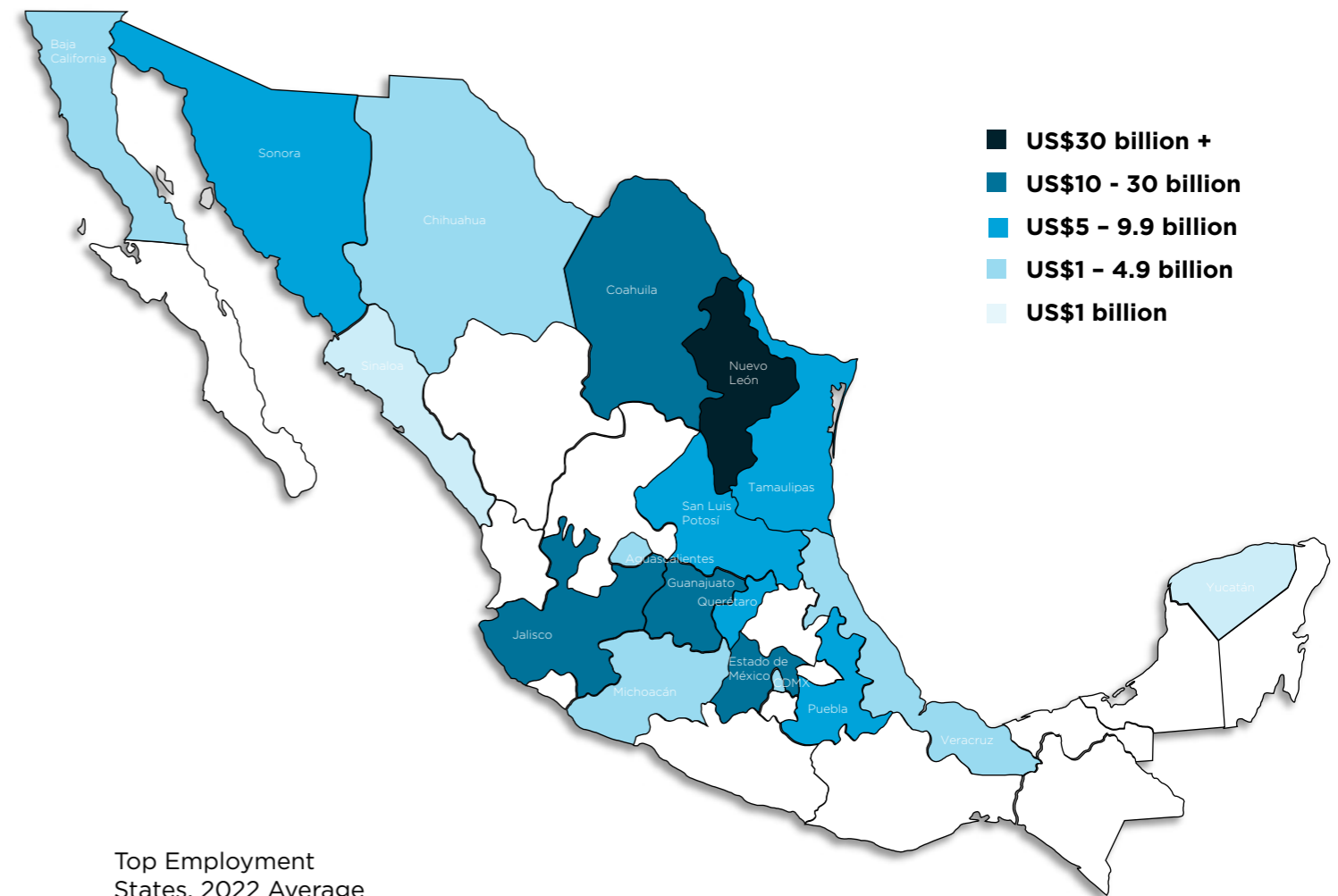
The USMCA positions North America for global competitiveness, and Mexico is poised to play an important role in nearshoring. Today, \$1.2 million dollars of commercial goods cross the U.S.-Mexico border every single minute. The Manufacturing operations located in Mexico are strategic to the most of the top U.S. manufacturers. A growing number of others rely on their binational operations structure in North America in order to be competitive in the market.

Through nearshoring as well as regional expansion, global organizations continue to inject capital into Mexico, elevating its strategic role for global footprints. And Mexican manufacturing exports have been on the rise, strongly driven by trade with the United States.

The IMMEX Program is an instrument which allows the temporary import of goods or services that are used in an industrial process or service to produce, transform or repair foreign goods imported temporarily to Mexico for subsequent export. This Mexican program aims to enable foreign companies to manufacture in Mexico through cost-efficient methods and incentives while still focusing on the quality of goods being produced. This industry is an indicator to the importance of the manufacturing-for-export sector in Mexico, and the development of the North American supply chains.

Annual Value of IMMEX Exports by Mexican State, 2022

Nearly US\$172 billion in goods and services was exported from Mexico in 2022 under the manufacturing-for-export (or IMMEX) program. Over the same year the average IMMEX employment population was 3.2 million.



Top Employment States, 2022 Average

STATE	# of IMMEX Establishments	IMMEX Employees
Chihuahua	588	445,379
Baja California	1,140	423,767
Veracruz	58	321,185
Sonora	355	316,975
Tamaulipas	421	298,875

Elaborated by Prodena with data from INEGI and IMMEX. States in white are summed as "other" in the data, but represent over US\$22 million in exports in 2022 and over 200 thousand IMMEX employees.



The Automotive Industry: true example of North American collaboration

The automotive industry is of utmost importance to the North American economies. It contributed more than US\$700 billion to the U.S. economy alone in 2021 and accounted for more than a tenth of total U.S. manufacturing output. The U.S. automotive industry is responsible for 10.3 million jobs, and each of those jobs creates an additional 11 jobs upstream or downstream. exerumene. Et ea vollaccum haria velicia ecerroria doluptatet aceris mo quidunt

The United States, Mexico and Canada share a population of +500 million people, a GDP of nearly US\$30 trillion dollars, and each alone are important global economies. One of every 17 U.S. jobs is supported by trade with Canada or Mexico. In fact, about 50% of trade within North America occurs in “intermediate goods” – materials or components destined for finished product.

The regions' interwoven supply chains have been developed and optimized from the abundance of Mexican labor and U.S. / Canadian technology. This regional system of manufacturing production leverages the countries' individual comparative advantages to compete as a region on the global automotive stage. In fact, automotive parts may cross the USMCA borders up to 8 times before final assembly.

Mexico's trade liberalization efforts mean that the market is one of the most open and competitive in the world. Mexico is a global leader in automotive manufacturing:



7th

largest manufacturer of passenger vehicles



2nd

largest exporter of passenger vehicles to the U.S.



4th

largest manufacturer of automotive parts



Top

exporter of automotive parts to the U.S.



6th

largest manufacturer of heavy trucks



Top

exporter of heavy-duty trucks to the U.S.



2nd

largest export market for U.S.-made heavy-duty trucks

The Mexican Automotive Industry Association estimates that Mexico will become the 5th largest global vehicle producer by 2025, expecting a full recovery after the chips shortage. The Mexican automotive industry employs over 1 million professionals, includes 300 R&D centers, and nearly 90% of all automotive production is destined for the export markets (79% of that going to the United States).

Mexico is a key ally and asset to U.S.-based high-technology manufacturing including semiconductors and electric vehicle, contributing to the construction of resilient supply chains in North America.



Robin Conklen
Managing Director, USA

With information sourced from: bea.gov, Auto Innovators, Business Roundtable, Brookings Institution, trade.gov, AMIA

Some of the key supply chain bases in Mexico:

Mexico has become an attractive location for companies looking to nearshore their supply chains, due to its proximity to the United States, lower labor costs, and favorable trade agreements.

Mexico Leads Key Sectors.

These manufacturing sectors offer a range of benefits for companies looking to establish operations in Mexico, including a skilled workforce, favorable trade agreements, and access to transportation infrastructure. Additionally, Mexico offers lower costs compared to many other countries, making it an attractive location for manufacturing operations.

Aerospace - Mexico has access to a potential high-tech export market, as a member of the Wassenaar Agreement.

Electronic - Mexico is the 8th largest producer of electronics in the world.

Automotive - Mexico is the 7th largest vehicle producer worldwide and 4th largest exporter globally.

Medical Devices - Mexico is the 8th largest global manufacturer of medical devices and top exporter to the U.S.

Metal Mechanic - Mexico is among the 10 main exporters of machinery and mechanical devices.

Furniture - Mexico is the 2nd largest furniture supplier to the U.S.

Pharmaceutical - Mexico is the 2nd largest industry in Latin America and the 12th in the world.

Biotechnology - Mexico is the 2nd country in Latin America with the highest number of patent applications.



Prodensa Recommendations

Kurt Schmidt, Prodensa's Consulting Director, identifies Total Cost of Ownership as the foundation for critical decisions and investments in supply chain relocation initiatives. TCO provides a comprehensive perspective of the costs associated with the strategy and empowers better decision-making. Kurt scrutinizes several factors in his analysis, with a focus on identifying both apparent and hidden costs.

The main factors to consider in supply chain relocation:



Labor costs.

One of the main reasons why companies choose to nearshore to Mexico is because of the lower labor costs compared to the United States or other countries. However, it's important to consider not only the direct labor cost in the region of operation, but also the indirect costs associated with training, turnover and productivity. The different regions in Mexico vary greatly.



Transportation costs.

Nearshoring to Mexico can reduce transportation costs, transit times and reduce inventory stocking / safety stocks especially if your products are destined for the United States market. However, it's important to consider the cost of transporting raw materials, components, and finished products to and from Mexico and across its varied landscape.



Regulatory compliance.

Mexico has a complex regulatory environment that can add to the Total Cost of Ownership of doing business in the country. Companies may need to invest in compliance-related activities, such as obtaining permits, certifications, or licenses, which can increase initial costs but also eliminate tariffs & duties, depending on the operating structure.



Infrastructure costs.

While Mexico has made significant investments in transportation and logistics infrastructure, there are still areas of the country that may lack the necessary infrastructure to support certain industries. Notable challenges include electricity costs, water scarcity, telecommunications and renewable energy sources.



Supply chain risks.

Nearshoring to Mexico may introduce new supply chain risks that did not exist for many companies previously, such as political instability or security concerns. But diversifying your global supply chain can potentially mitigate other risks like logistics snags or demand-planning. Companies may need to invest in risk mitigation activities, such as insurance or contingency planning, which can be an unforeseen cost.

Overall, the costs of supply chain relocation to North America could be significant. But they can be offset by the benefits that come with it, such as improved supply chain resilience, reduced risk and increased customer satisfaction. Educate yourself with tangible data and if needed select an advisor to mitigate the risks to nearshoring your supply chain.



What is the due diligence process for analyzing feasibility for supply chain relocation?

KS: The first step is to gain a full understanding of the reasons driving the relocation, whether it is due to pricing pressures or changes in trade policy. Different scenarios should be formulated, and a location analysis should be conducted to test the business case against factors such as time, cost, and sustainability. A risk assessment for the top scenario should be included, so that a mitigation plan can be initiated. The evaluation of potential suppliers should be done across multiple factors, such as capabilities, quality, and pricing. Finally, a transition plan should be put in place, which should identify critical milestones, develop a communication plan, and ensure that all necessary resources are available.

What are some of the challenges of relocating supply chains to Mexico?

KS: In my opinion, the use of different languages (technical and conversational) can frequently complicate or create delays in the process. These negotiations serve as a bridge between two different legal systems and even though the cultures may be relatively similar, both countries have different set of motivations and different negotiation styles. When doing business in Mexico, the best approach to suppliers is to use relationship-building strategies, creating trust between the two. If there is a lack of information (such as no technical drawings), it can lead to negotiations based on completely incorrect assumptions. Ultimately, the most significant challenge is often the lack of preparation and due diligence, which leads to a fundamental miscalculation of the Total Cost of Ownership (TCO). Making an informed decision and avoiding major surprises can determine the difference between success and failure.

What makes a Good supplier in Mexico?

KS: The most important factor is the right "fit" to your business. Finding it, is crucial for any business as it can affect the quality of products, delivery time, and customer service. To ensure a good fit, consider volume capabilities (HVLM-LVHM) and quality systems as "musts" as those are more difficult to change. While it may be easy to request a commercial quote, understanding the implications of a possible relationship requires deeper analysis. Other important factors to consider include financial stability, ability to scale up, downstream supply chain visibility. With increasing demand, Mexican suppliers are selective in their approach and prioritize finding a match in culture and work style/goals. As conversations proceed, its beneficial to include a bilingual, technical specialist as I have seen some very costly mistakes stem from small communication errors.

We guide our clients through multiple exploratory scenarios, enabling them to make informed decisions, selecting the right supply partner or locations and understanding the new locations how to do business in such location.

ABOUT PRODENSA

Serving Foreign investors in Manufacturing Industry since

1986



+300 K

People Hired

Our culture the key of our success



= philosophy
+ knowledge
+ execution

Assisted with the start up and expansion of **1000+** projects in Mexico

+700

professionals are a part of our team

Awards



Employers For Youth



SÚPER ESPACIOS DE TRABAJO 2021 wework EXPANSION TOP COMPANIES



EMPRESA SOCIALMENTE RESPONSABLE

Material Experts



START UP / SHELTER OPERATIONS



HUMAN RESOURCES



MARKET INTELLIGENCE



CONTRACT MANUFACTURING



ENVIRONMENTAL HEALTH & SAFETY



CONSTRUCTION SOLUTIONS



INTERNATIONAL TRADE COMPLIANCE



INDUSTRIAL REAL ESTATE



INSTITUTIONAL RELATIONS



CONTRACT LOGISTIC



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