



Universidad
Tecmilenio®



International Business Management

Industrial clusters
and technology

Week 5



A beginner's mind

Before you begin, do the following mental activity that will help you to improve your concentration.

<https://youtu.be/JNCVDK2thZI>



In this fifth week, you will learn about the whole definition of industrial clusters and their technology, as well as the challenges in the region according to the politics and security. Another important topic you will learn are the social and economic factors in the region and their relationship with the primary sector of US and Canada.



The highly competitive markets of today require heavy investments in research and development (commonly known as R&D) to create added value for the goods you want to sell. Most of the success of a company, however, not only relies on its capacity to deliver added value, but also in its ability to create value chains to make the best out of their investment to produce a good or a service.



Latin American reality is that private investments in R&D do not substitute the government's minimum allocation of resources (David, Hall and Toole 2000), as it happens in the USA (Rissman and Savitz, 2013). Chile, Brazil, Argentina and Mexico are the Latin American countries with the highest investment rates in the region (Botella and Suárez, 2012), as expected, but those rates still fall short (Bárcena, n.d.). The World Bank (2013) issued a special report on the topic, conducting research that concludes that private investments in R&D are rather low, so better policies are needed in order to create a positive business environment that may attract firms that are really interested in funding innovation.



Multinational companies have created sound supply chains throughout the world to take competitive advantages against competitors those companies investing in R&D are seeking to make profits as first movers, and that is why they choose to invest in a country where there is enough infrastructure in place and where the government is pro-business (i.e., highly sensitive about the importance of innovation).

The role of education and research is key to understand where the best human resources are. So, it is not strange that multinationals tend to stay close to universities and research centers of the region, always looking for the best skilled and educated prospects.

Multinational companies expand based on the availability of new elements that increase their added value and strengthen their core competences, and it cannot be done without the constant support of serious R&D.



In economics, a **cluster** is defined as a regional concentration of related industries in order to create value chains (most of them knowledge-based.)



They are popular, and now you can find them everywhere from Alaska to the Patagonia. Every country has them in strategic locations, depending on the economic sectors and industries particular of the country (like Mexico's electronics and renewable energy clusters.)

Industrial clusters are often seen as a national advantage because it is easier for them to create economies of scale and benefit of the learning curve they feed.



In the Latin American sphere, the Inter-American Development Bank has conducted some research on the matter, concluding that most of them are mainly at the primary sector (natural resources), such as salmon in Chile, dairy products in Nicaragua, fruit produce and metalworking in Brazil, and software in Mexico. Clearly not enough, considering the potential of the region.

Characteristics of cluster skills centers

- Cluster, not technology based
- Emphasis on industry-specific knowledge, not job-specific skills
- Critical links to industry associations
- Uses business, not machine, as context
- Functions as information repository and information portal
- Budget stresses staff and curricula, not bricks and mortar
- Share curricula and information cluster-wide, and train faculty from other places
- Lead responsibility for cluster needs assessments, skill standards

Activity

Reflect on what you have learned and answer the following activity.

Does corporate investment in R&D compensate for the lack of government funding?

1. Read [the paper](#) by Paul A. David, Bronwyn H. Hall, and Andrew A. Toole (2000).
2. List the investigations cited, their methods, and their conclusion.
3. What do David, Hall and Toole recommend for future research?
4. Locate a more recent analysis. What are new findings regarding the effects of private/public investment on R&D? What has changed in the last 20 years?



International Business Management

Political and security
challenges in the region

Week 5



Many Latin American countries have seen leftist parties and candidates win local elections because of their promise to fight inequality and revert the negative impact of neoliberal policies. Hence, the importance to have a better understanding of the political trends that prevail in the country you would like to do business in because that sets the ground for either a positive or negative business environment.



After Donald Trump won the election in 2016, markets had a negative impact. This happened because investors considered that Hillary Clinton would win and consequently, the markets are recalibrating.

Now, with Joe Biden's win in 2020 from the Democratic Party, markets have a better scenario despite Covid-19, however, both North America and Latin America have their own more serious security challenges, each connected one with another.

United States security challenges



The United States is a major consumer of illegal drugs.

Number one position on top 10 Latin American countries according to their black-market value.



Just like politics, geography plays an important role in the Americas.

You can notice that South America has been traditionally more attached to Europe, while the Central America and the Caribbean have closer ties to the United States.

What could be candidly seen by local governments as a counterweight to level American imperialism, it can have important geopolitical consequences in the region, thus reshaping the way countries relate with each other. In business terms, the presence of China instantly impacts the Latin American economic environment (trade, investments, and labor rights as well).



The activities of the organized crime also affect businesses because it creates an insecure environment for people in general, as cartels infiltrate politics and the judiciary system, leaving businesses and citizens alike without protection. Blatant corruption practices are so widespread in the region that the social cost is too high and ultimately impact business opportunities. Black markets even surpass the legal ones in some areas. Of course, because of their illegal nature, it is difficult to have exact numbers, but estimates are very high.



Activity

Reflect on what you have learned and answer the following activity.

In pairs, discuss and compare information regarding the following topics.

1. How the political environment of a country is related to its economy.
2. How treaties with China leverage the relationship of Latin American nations with the United States of America.
3. The effect of organized crime in business.



International Business Management

Social and economic
factors in the region

Week 5



Some people think of business as cold and merely about money. Yet, developing empathy and awareness of the other is also necessary. Being able to anticipate other people's needs and responses to our proposals is a required skill. Awareness of cultural differences can be a defining factor when negotiating successfully. Culture is always a recurrent topic in international business, a very important one when it comes to doing business in the Americas. First, there are huge cultural differences between those in the continent that speak English, Spanish and Portuguese. So, let's begin by exploring some of their main characteristics, rules of conduct, and social attitudes.



The way people communicate, and more importantly, what they like, and dislike is based on their cultural background.

Businesses are embedded in their home culture, and even multinational companies print their own cultural footprint wherever they go and set up shop (or vice versa).

In addition, focusing on single cultures is also not recommended because our continent is so rich in that sense; instead, you need to know that every subregion has a certain way to conduct business meetings and a general business etiquette that you may respect in order to avoid making big management and cross-cultural mistakes.

However, it is not that simple, there is still a great variety of subcultures to assess. Turns out that you may or may not have a personal culture that corresponds to the place where you live (one can find strong cultural differences even among us Mexicans, for that matter).



Unfortunately, one pervasive characteristic of Latin American countries is income inequality, which can lead to a state of social vulnerability that ultimately affects businesses. It is an open issue that is addressed in different ways (one of them being not addressing it at all), and it is regarded as one of the reasons why leftist parties are winning elections at all levels throughout the continent. These social and economic factors deserve careful attention because you want to sell products or services where people can afford them.

If you look at the numbers, it seems like there is a big gap between the US/Canada and the rest of the continent, so there is room for improvement. In the meantime, the North American market remains as the most profitable and attractive of the region.





In the late 1980s, there was a radical shift from the socialist/populist approach in Latin America to another based on free-market economies. After decades of poor economic performance, countries were forced by the World Bank and the International Monetary Fund to foster the so-called “neoliberal” policies.

The first country in the region to do so was Chile. However, after two decades and a half, neoliberalism was already in decline with rising labor emigration and a net outflow of financial resources from the region. As a result, the left is making a strong return in Latin America amid worsening economic conditions due to the failure of such economic liberal policies in a context of world recession.

Nevertheless, most countries have already tasted the benefits of open trade, so they are being more cautious with their policies in this regard.

Activity

Reflect on what you have learned and answer the following activity.

Think of your own exposure to different cultures. Do you speak more than one language? How did you learn it? How does this allow you to communicate with other people?

1. Reflect on the following and comment with your peers.
 - How has knowledge and exposure to another language and culture change your own perception of the world around you?
 - How does being multicultural build your identity as a businessperson?
2. Watch John Ross's lecture in the Terry College of Business. Reconsider your answers from the triggering questions in the introduction to this lesson.
 - How does your opinion change after this lecture?
 - How is business personal and "not just business"?



International Business Management

Primary sector in
the US and Canada

Week 5

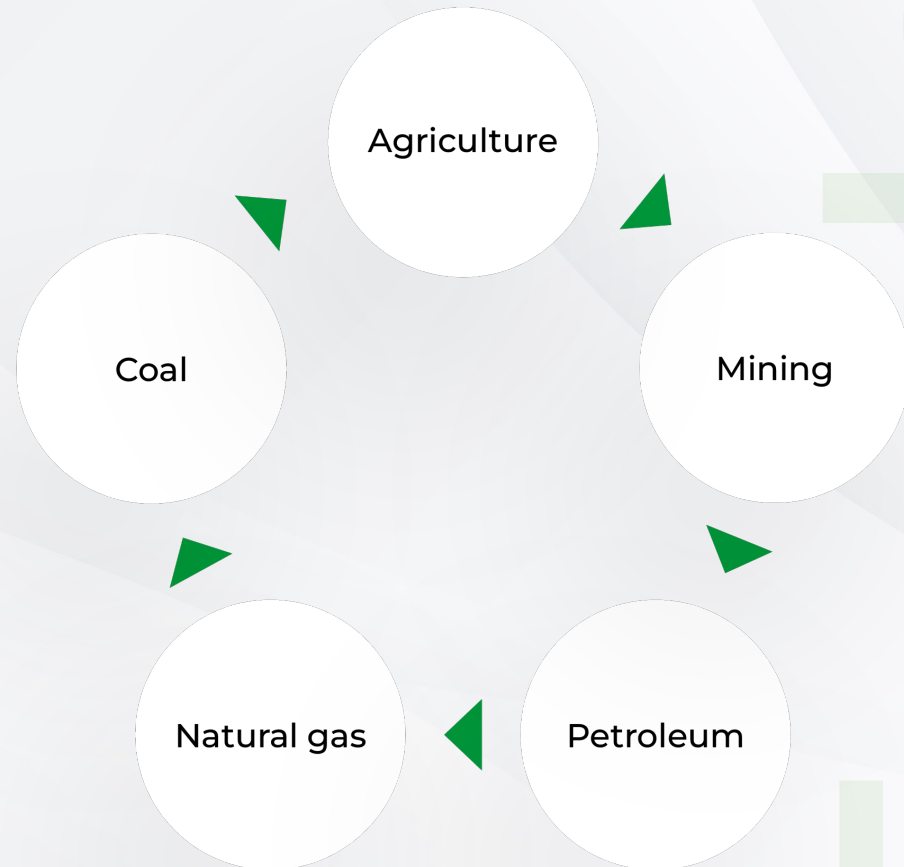


First, let's start by distinguishing the three basic categories in which most modern economies are divided: the **primary**, **secondary**, and **tertiary** sectors.

Inside the USA itself, there are different realities, either in cultural or political terms, the whole nation could be easily divided in East and West, or North and South. One can find large and important cities in every corner of the country: New York City, Boston and Philadelphia in the Northeast; Miami, Atlanta, New Orleans and Houston in the South; Chicago, Minneapolis, St. Louis, Detroit and Dallas in the Midwest; and Los Angeles, San Francisco, Phoenix, Denver and Seattle out West. Every one of these cities represent a huge market and all of them have an economic regional influence. Even so, many of them are port cities with high-end industrial clusters and world-class universities. Yet not every big city has a well-developed primary, secondary and tertiary sector (it rarely happens). Same thing with the largest Canadian cities, such as Calgary, Vancouver, Toronto, Montreal, Ottawa, Edmonton and Winnipeg.



Talking about the United States, their top export industries are primary commodities like grains, seeds, nuts, and crude/refined fuels. They have a very innovative primary sector, and Latin America needs to improve its commodities game in order to be competitive.



Explanation

Enterprises and companies working with natural resources in the United States are regulated by the Environmental Protection Agency, which oversees protecting the environment and securing a responsible use of resources (which means a heavy burden for companies starting operations there.)



The EPA, however, is also a reliable source of information for many industries when it comes to measuring their environmental impact. For example, climate change, despite constant innovation in the agribusiness, high-impact weather events are very common nowadays.





Canada's primary sector is also quite small when compared to their whole economy (~1.7% of its GDP), but still important in terms of industry performance in the world. Their leading industries are logging and oil, with a very essential mining network that mainly exports to the United States.

Canada is the world's largest producer of zinc, uranium, potassium, cadmium, sulfur and nickel. And even though the size of its arable land is rather small (about 8% of their whole territory), it is a major exporter of agricultural products. In general terms, the number of people employed in the primary sector has diminished, but considering the technological innovation and its economic relevance, the sector itself has not decreased in the same terms at all.

Activity

Reflect on what you have learned and answer the following activity.

1. Research and read environmental rules and policies in the United States and Canada. Then, research rules and policies in any country in Central or South America. Compare them.
 - How and why do these regulations differ?
 - How does a different environment lead to a difference in environmental policies?
2. Reflect on your own role as an ethical businessperson concerned for the environmental impact of your business.
 - Are these regulations a limitation or an opportunity to do business there?
 - Shall Mexico adopt some of these same policies? Why or why not?



As we have learned in this week, the primary sector in the United States and Canada is not the most important one in terms of GDP, it is still a world-class set of industries that remain highly competitive in most world markets. We have also learned that culture is always a recurrent topic in international business, a very significant one when it comes to doing business in the Americas.

