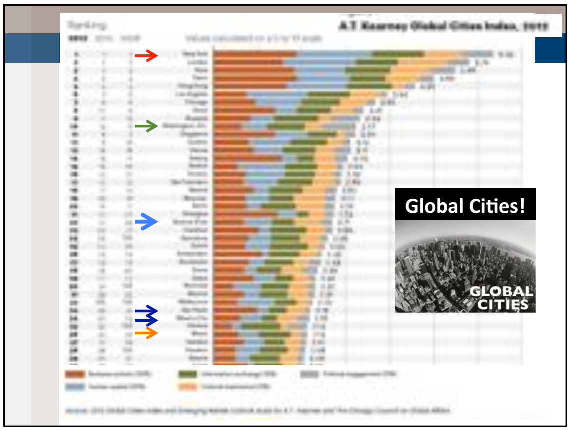
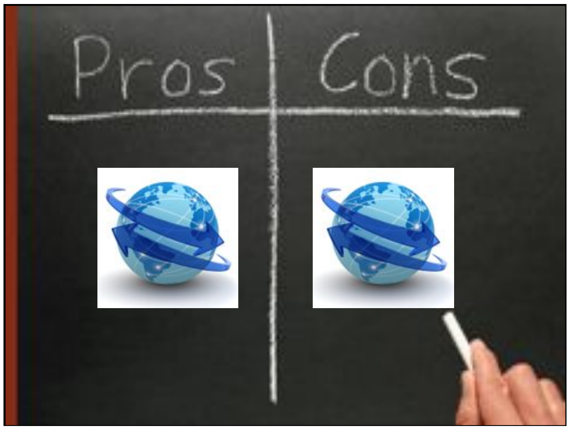
Logística como un Elemento Clave para Mejorar la Competitividad bajo un Entorno de Globalización

Ricardo Ernst, PhD

Compitiendo por todo con todos de todas partes!

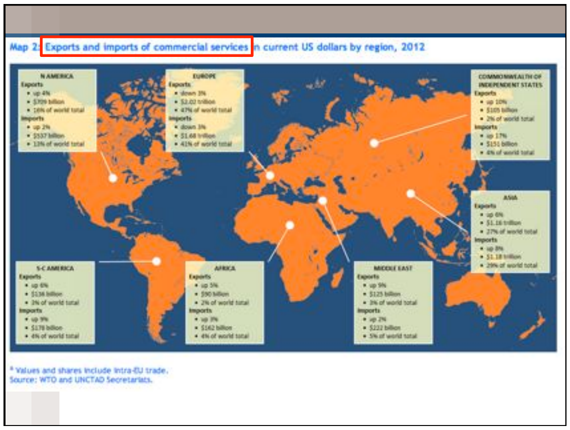
Produciendo en cualquier parte para vender en todas partes!





Map 1: Merchandise exports and imports in current US dollars by region, 2012ᵃ

ᵃ Values and shares include intra-EU trade.
Source: WTO Secretariat.



Map 2: Exports and imports of commercial services in current US dollars by region, 2012

ᵃ Values and shares include intra-EU trade.
Source: WTO and UNCTAD Secretariats.

Free Trade Agreements (FTA):

Mexico has signed 44 FTA (more than any country in the World!)
More than twice as many as **China** and four times more than **Brazil.**

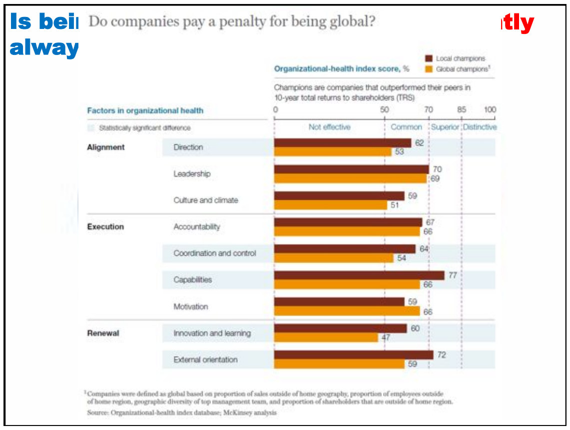
Yo **No** lo creo!

Is Globalization Reversible?

Globalization is here to Stay!

Just Smile!

I HATE Globalization!



¹Companies were defined as global based on proportion of sales outside of home geography, proportion of employees outside of home region, geographic diversity of top management team, and proportion of shareholders that are outside of home region.

Source: Organizational-health index database; McKinsey analysis

The Power of the Brand

Las 10 Compañias que controlan TODO lo que Uds. compran!

Las mejores 25 marcas globales ….
Cuántas son Latinoamericanas?

Fuente: Interbrands (2009). http://www.interbrand.com/best_global_brands.aspx

Las 50 marcas más valiosas de América Latina

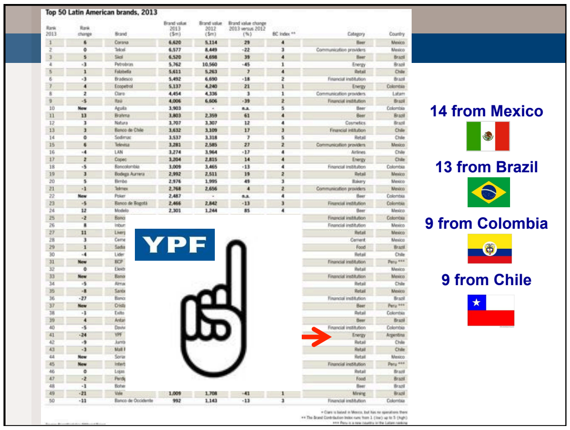
Las marcas más valiosas de América Latina

	Marca	País	Valor US$ mill.	Sector
1	Itaú	Bra	5.962	Ss. Financ.
2	Bradesco	Bra	5.213	Ss. Financ.
3	Banco do Brasil	Bra	4.429	Ss. Financ.
4	Cemex	Méx	3.998	Cemento
	Claro	Reg	3.593	Telecom.
	Telmex	Méx	3.482	Telecom.
7	Petrobras	Bra	3.073	Energía
	Telcel	Méx	2.703	Telecom.
9	Unibanco	Bra	2.695	Ss. Financ.
10	Banco de Chile	Chi	1.784	Ss. Financ.
11	Vale	Bra	1.778	Minería
12	Televisa	Méx	1.563	Medios
13	Elektra	Méx	1.344	Comercio
14	Natura	Bra	1.062	Quím./ Fcia.
15	BCI	Chi	1.031	Ss. Financ.
16	Banorte	Méx	846	Ss. Financ.
	Vivo	Bra	760	Telecom.
18	Bodega Aurrera	Méx	515	Comercio
19	Bancolombia	Col	476	Ss. Financ.
20	Bimbo	Méx	454	Alimentos
21	Gerdau	Bra	395	Sider.
22	Sodimac	Chi	389	Comercio
23	Usiminas	Bra	370	Sider.
24	BCP	Perú	368	Comercio
25	Líder	Chi	344	Comercio
26	Soriana	Méx	310	Comercio
27	Falabella	Chi	287	Comercio
28	TV Azteca	Méx	267	Medios
29	Banco de Bogotá	Col	258	Ss. Financ.
	Tigo	Reg	208	Telecom.
31	Banrisul	Bra	179	Ss. Financ.
32	Banamex	Méx	176	Ss. Financ.
	Comcel	Col	147	Telecom.
34	Interbank	Perú	146	Ss. Financ.
35	Corp S. Financ.	Chi	145	Ss. Financ.
36	Concha y Toro	Chi	134	Beb./ Licores
37	Liverpool	Méx	127	Comercio
38	Suburbia	Méx	104	Comercio
39	Santa Isabel	Chi	95	Comercio
40	Jumbo	Chi	90	Comercio
41	Paris	Chi	78	Comercio
42	Superama	Méx	78	Comercio
43	Easy	Chi	76	Comercio
44	Submarino	Bra	73	Comercio
	Oi	Bra	69	Telecom.
46	Davivienda	Col	65	Ss. Financ.
47	Tottus	Per	63	Com.
48	COPEC	Chi	61	Energía
49	Lojas Americanas	Bra	56	Comercio
50	Ipiranga	Bra	43	Energía

15 Brasil
14 México
12 Chile
4 Colombia
3 Perú

Reparto sectorial
Marcas Latinas Top 50.
Representantes por sector, 2008

Fuente: Revista América Economía Septiembre 2008



Top 50 Latin American brands, 2013

Rank 2013	Rank change	Brand	Brand value 2013 ($m)	Brand value 2012 ($m)	Brand value change 2013 versus 2012 (%)	BC Index **	Category	Country
1	6	Corona	6,620	5,114	29	4	Beer	Mexico
2	0	Telcel	6,577	8,449	-22	3	Communication providers	Mexico
3	5	Skol	6,520	4,698	39	4	Beer	Brazil
4	-3	Petrobras	5,762	10,560	-45	1	Energy	Brazil
5	1	Falabella	5,611	5,263	7	4	Retail	Chile
6	-3	Bradesco	5,492	6,690	-18	2	Financial institution	Brazil
7	4	Ecopetrol	5,137	4,240	21	1	Energy	Colombia
8	2	Claro	4,454	4,336	3	1	Communication providers	Latam
9	-5	Itaú	4,006	6,606	-39	2	Financial institution	Brazil
10	New	Aguila	3,903	-	n.a.	5	Beer	Colombia
11	13	Brahma	3,803	2,359	61	4	Beer	Brazil
12	3	Natura	3,707	3,307	12	4	Cosmetics	Brazil
13	3	Banco de Chile	3,632	3,109	17	3	Financial institution	Chile
14	0	Sodimac	3,537	3,318	7	5	Retail	Chile
15	6	Televisa	3,281	2,585	27	2	Communication providers	Mexico
16	-4	LAN	3,274	3,964	-17	4	Airlines	Chile
17	2	Copec	3,204	2,815	14	4	Energy	Chile
18	-5	Bancolombia	3,009	3,465	-13	4	Financial institution	Colombia
19	3	Bodega Aurrera	2,992	2,511	19	2	Retail	Mexico
20	5	Bimbo	2,976	1,995	49	3	Bakery	Mexico
21	-1	Telmex	2,768	2,656	4	2	Communication providers	Mexico
22	New	Poker	2,487	-	n.a.	4	Beer	Colombia
23	-5	Banco de Bogotá	2,466	2,842	-13	3	Financial institution	Colombia
24	12	Modelo	2,301	1,244	85	4	Beer	Mexico
25	-2	Banc					Financial institution	Colombia
26	8	Inbur					Financial institution	Mexico
27	11	Liverp					Retail	Mexico
28	3	Ceme					Cement	Mexico
29	1	Sadia					Food	Brazil
30	-4	Lider					Retail	Chile
31	New	BCP					Financial institution	Peru ***
32	0	Elekt					Retail	Mexico
33	New	Banor					Financial institution	Mexico
34	-5	Alma					Retail	Chile
35	-8	Sanb					Retail	Mexico
36	-27	Banc					Financial institution	Brazil
37	New	Crista					Beer	Peru ***
38	-1	Exito					Retail	Colombia
39	4	Antar					Beer	Brazil
40	-5	Daviv					Financial institution	Colombia
41	-24	YPF					Energy	Argentina
42	-9	Jumb					Retail	Chile
43	-3	Mall P					Retail	Chile
44	New	Soria					Retail	Mexico
45	New	Interb					Financial institution	Peru ***
46	0	Lojas					Retail	Brazil
47	-2	Perdig					Food	Brazil
48	-1	Bohen					Beer	Brazil
49	-21	Vale	1,009	1,708	-41	1	Mining	Brazil
50	-11	Banco de Occidente	992	1,143	-13	3	Financial institution	Colombia

* Claro is based in Mexico, but has no operations there
** The Brand Contribution Index runs from 1 (low) up to 5 (high)
*** Peru is a new country in the Latam ranking

14 from Mexico
13 from Brazil
9 from Colombia
9 from Chile

Globalización

- Proceso trasnacional de relaciones económicas, políticas, tecnológicas y culturales que **genera relaciones interdependientes** entre estados, empresas, organizaciones e individuos.
- La globalización ha traído consigo una acelerada reducción de las barreras al movimiento de ideas, capitales y personas, la apertura de nuevos mercados, y la retirada del gobierno del área económica.
- **Afecta a todos los países** independientemente de su condición económica, política o social.
- La discusión debe cambiar de la simple evaluación de ventajas y desventajas de la globalización, a una discusión más relevante que incluye **la manera en la cual los países, empresas e individuos pueden beneficiarse de la globalización**.

② Competitiveness

La Competitividad hace la Diferencia entre ir hacia Arriba o hacia Abajo!

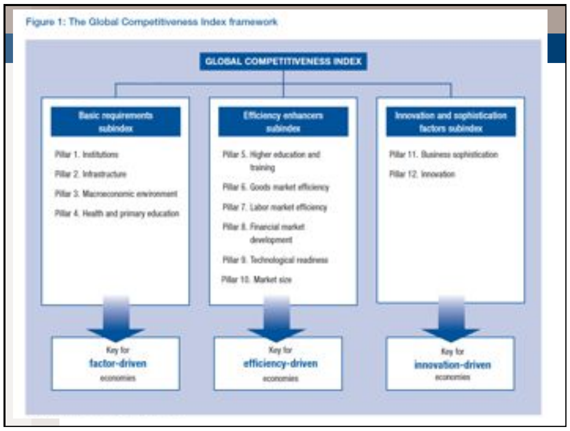
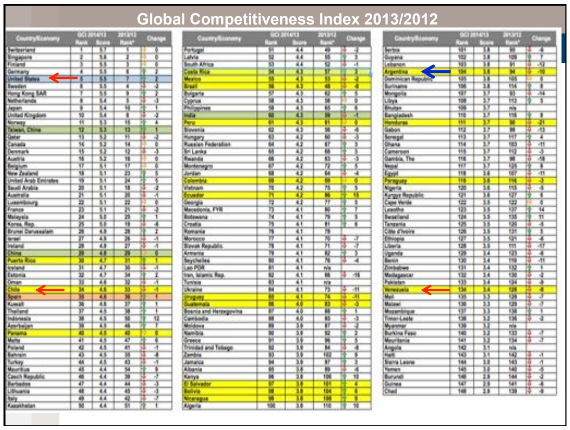


Figure 1: The Global Competitiveness Index framework

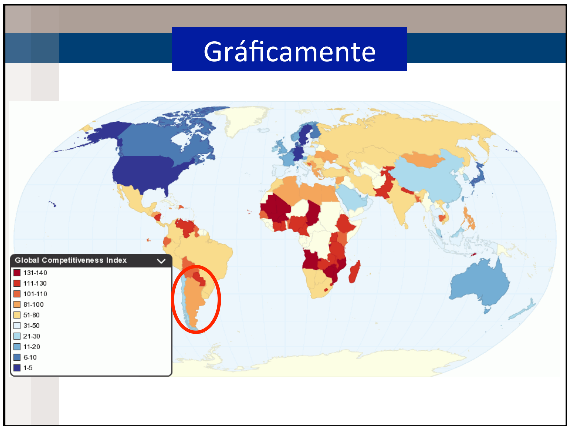
GLOBAL COMPETITIVENESS INDEX

Basic requirements subindex	Efficiency enhancers subindex	Innovation and sophistication factors subindex
Pillar 1. Institutions	Pillar 5. Higher education and training	Pillar 11. Business sophistication
Pillar 2. Infrastructure	Pillar 6. Goods market efficiency	Pillar 12. Innovation
Pillar 3. Macroeconomic environment	Pillar 7. Labor market efficiency	
Pillar 4. Health and primary education	Pillar 8. Financial market development	
	Pillar 9. Technological readiness	
	Pillar 10. Market size	
Key for **factor-driven** economies	Key for **efficiency-driven** economies	Key for **innovation-driven** economies

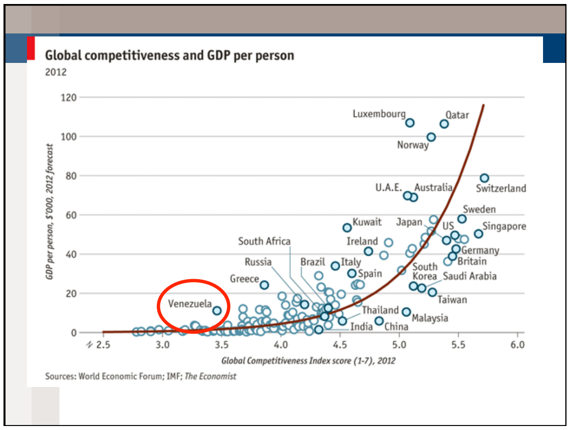
Quiénes son?



Global Competitiveness Index 2013/2012



Gráficamente

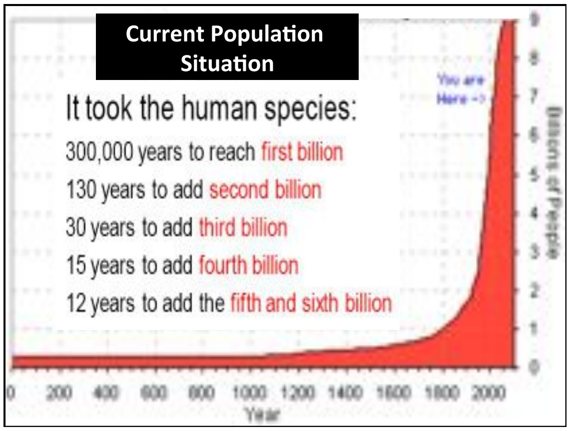


Global competitiveness and GDP per person

2012

Sources: World Economic Forum; IMF; *The Economist*

Main Problem:
Qué Rol Juega uno en esto?



Current Population Situation

It took the human species:

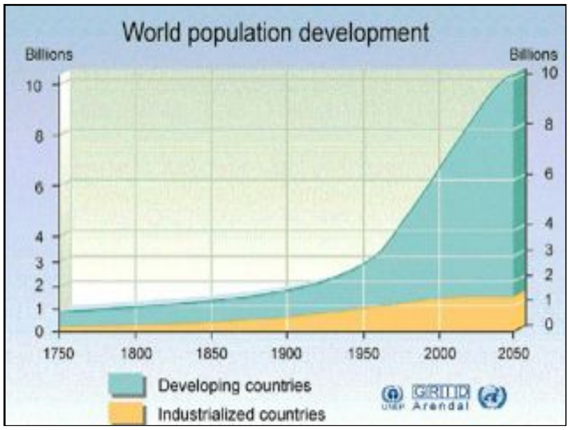
300,000 years to reach first billion

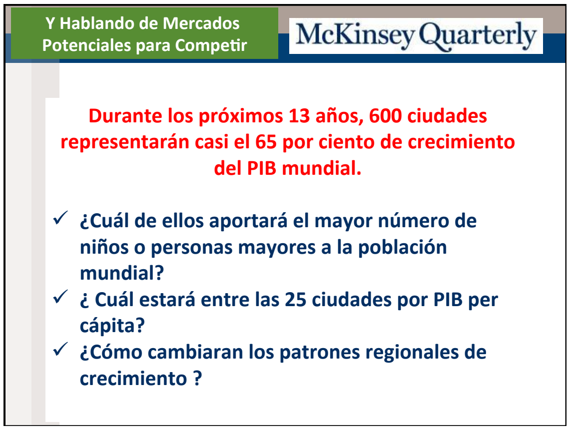
130 years to add second billion

30 years to add third billion

15 years to add fourth billion

12 years to add the fifth and sixth billion





Y Hablando de Mercados Potenciales para Competir

McKinsey Quarterly

Durante los próximos 13 años, 600 ciudades representarán casi el 65 por ciento de crecimiento del PIB mundial.

- ✓ **¿Cuál de ellos aportará el mayor número de niños o personas mayores a la población mundial?**
- ✓ **¿ Cuál estará entre las 25 ciudades por PIB per cápita?**
- ✓ **¿Cómo cambiaran los patrones regionales de crecimiento ?**

Y Hablando aún más de Mercados Potenciales para Competir

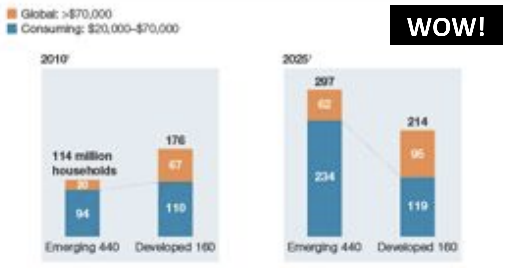
McKinsey Quarterly

"La rápida urbanización está impulsando el crecimiento en los mercados emergentes y el cambio de equilibrio económico del mundo hacia el este y el sur.

En 2025, se creará una "clase consumidora", con más de cuatro mil millones de personas, frente a los mil millones en 1990. Casi la mitad de ellos viven en las ciudades del mundo emergente, lo cual inyectara casi $ 25 trillones de dólares en la economía mundial.

Y los líderes de negocios en su mayoría los ignoran."

By 2025, 440 emerging-market cities will have more households with incomes of $20,000 or above than will the cities in developed economies.



¹In 2005 dollars, adjusted for purchasing-power parity; subtotals may not sum to totals, because of rounding.

McKinsey Quarterly

Determinants of Competitiveness

WORLD ECONOMIC FORUM

Requerimientos básicos
- Instituciones
- Infraestructura
- Estabilidad macroeconómica
- Salud y educación primaria

Economías conducidas por factores estructurales: 50 / 40 / 10

Promotores de eficiencia
- Educación superior y entrenamiento
- Eficiencia de mercado (bienes y trabajo) Sofisticación del mercado financiero
- Dotación tecnológica
- Tamaño del mercado

Economías conducidas por eficiencia: 40 / 50 / 10

Factores de innovación y sofisticación
- Sofisticación de los negocios
- Innovación

Economías conducidas por innovación: 30 / 40 / 30

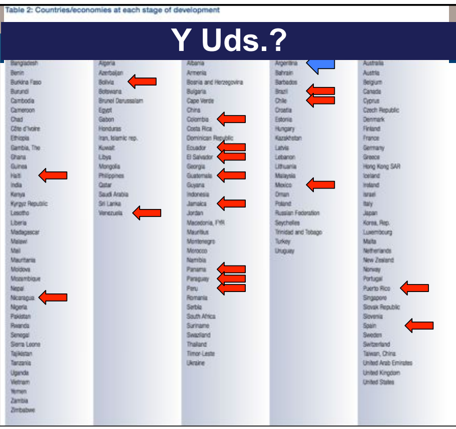
Determinants of Competitiveness

WORLD ECONOMIC FORUM

1) Economías conducidas por factores estructurales →	**Nicaragua**
Transición de Etapa 1 a 2 →	**Bolivia, Honduras, Venezuela**
2) Economías conducidas por eficiencia →	**Colombia, Costa Rica, Panama**
Transición de Etapa 2 a 3 →	**Argentina, Brasil, Chile, Mexico**
3) Economías conducidas por innovación →	**Puerto Rico, Francia, Alemania, Italia, Japón, España, USA**

Table 2: Countries/economies at each stage of development

Y Uds.?



Bangladesh
Benin
Burkina Faso
Burundi
Cambodia
Cameroon
Chad
Côte d'Ivoire
Ethiopia
Gambia, The
Ghana
Guinea
Haiti
India
Kenya
Kyrgyz Republic
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Moldova
Mozambique
Nepal
Nicaragua
Nigeria
Pakistan
Rwanda
Senegal
Sierra Leone
Tajikistan
Tanzania
Uganda
Vietnam
Yemen
Zambia
Zimbabwe

Algeria
Azerbaijan
Bolivia
Botswana
Brunei Darussalam
Egypt
Gabon
Honduras
Iran, Islamic rep.
Kuwait
Libya
Mongolia
Philippines
Qatar
Saudi Arabia
Sri Lanka
Venezuela

Albania
Armenia
Bosnia and Herzegovina
Bulgaria
Cape Verde
China
Colombia
Costa Rica
Dominican Republic
Ecuador
El Salvador
Georgia
Guatemala
Guyana
Indonesia
Jamaica
Jordan
Macedonia, FYR
Mauritius
Montenegro
Morocco
Namibia
Panama
Paraguay
Peru
Romania
Serbia
South Africa
Suriname
Swaziland
Thailand
Timor Leste
Ukraine

Argentina
Bahrain
Barbados
Brazil
Chile
Croatia
Estonia
Hungary
Kazakhstan
Latvia
Lebanon
Lithuania
Malaysia
Mexico
Oman
Poland
Russian Federation
Seychelles
Trinidad and Tobago
Turkey
Uruguay

Australia
Austria
Belgium
Canada
Cyprus
Czech Republic
Denmark
Finland
France
Germany
Greece
Hong Kong SAR
Iceland
Ireland
Israel
Italy
Japan
Korea, Rep.
Luxembourg
Malta
Netherlands
New Zealand
Norway
Portugal
Puerto Rico
Singapore
Slovak Republic
Slovenia
Spain
Sweden
Switzerland
Taiwan, China
United Arab Emirates
United Kingdom
United States

BUILDING GLOBAL COMPETITIVENESS

Competitividad

- La competitividad es la única manera en la cual los países, empresas e individuos pueden verdaderamente aprovecharse de ese proceso. **La globalización no permite ineficiencias. La competitividad es la respuesta al desafío impuesto por las fuerzas globales de competencia.**
- La **brecha que existe en la competitividad** entre Ibero América y otras regiones convierte la competitividad en una prioridad. ¿Cómo pueden las empresa y los países volverse más competitivos?
- La dinámica de la globalización, acentuada por el fenómeno tecnológico, ha incrementado las operaciones comerciales y financieras, lo **cual implica mayor competencia en los mercados y, por consiguiente, obliga a mejorar la competitividad de los productos**.
- La globalización exige la transformación de los sistemas productivos y la adopción de estrategias que **incentiven el fortalecimiento de la competitividad**.

3 Governability

Gobernabilidad

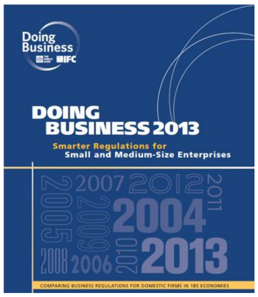
- Tanto la globalización como la competitividad están **regidas fundamentalmente por las fuerzas del mercado**. Es la famosa "mano invisible" del mercado que empuja a mejorarse con el objetivo claro de aprovechar las ventajas de la globalización.
- La mejora en la gobernabilidad del estado se convierte en un requisito para que las empresas sean competitivas y el país pueda beneficiarse de la globalización.
- La mejora en la gobernabilidad del estado fuerza a una **reorientación de sus políticas públicas** de manera que éstas no restrinjan el campo de maniobra de las empresas, sino que garanticen su plena integración a una sociedad global dinámica y colmada de oportunidades.
- El papel del gobierno pasa de dirigir el desarrollo del país a establecer las bases adecuadas para que los **agentes económicos alcancen los niveles de eficiencia necesarios para competir en un mercado globalizado**.

Corruption Index:

Indicates the corruption level on the public sector according to perception of businessmen and analysts

Source: Transparency International. http://www.transparency.org/policy_research/surveys_indices/cpi/2009/press_kits

Ease of Doing Business

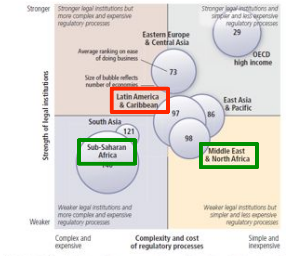


http://www.doingbusiness.org/~/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB13-full-report.pdf

Ease of Doing Business

FIGURE 1.1 OECD high-income economies combine efficient regulatory processes with strong legal institutions

Average ranking on sets of *Doing Business* indicators



Note: Strength of legal institutions refers to the average ranking on getting credit, protecting investors, enforcing contracts and resolving insolvency. *Complexity and cost of regulatory processes* refers to the average ranking on starting a business, dealing with construction permits, getting electricity, registering property, paying taxes and trading across borders.

Source: Doing Business database.

Ease of Doing Business

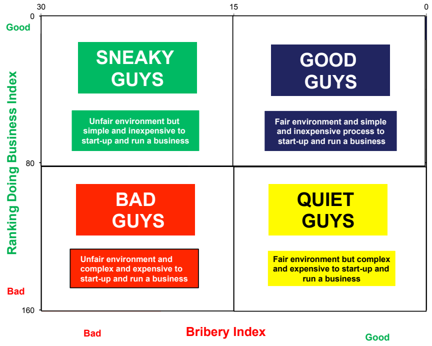
FIGURE 3.1 Colombia has outpaced the region in advancing toward the frontier in regulatory practice

Progress in narrowing distance to frontier since 2005 (percentage points)

Note: The distance to frontier measure shows how far on average an economy is from the best performance achieved by any economy on each *Doing Business* indicator since 2005. The measure is normalized to range between 0 and 100, with 100 representing the best performance (the frontier). The figure shows the absolute difference for each economy between its distance to frontier in 2005 and that in 2012. No data are shown for The Bahamas and Barbados, which were added to the *Doing Business* sample after 2005.

Source: Doing Business database.

Government and Performance



SNEAKY GUYS

Unfair environment but simple and inexpensive process to start-up and run a business

GOOD GUYS

Fair environment and simple and inexpensive process to start-up and run a business

BAD GUYS

Unfair environment and complex and expensive to start-up and run a business

QUIET GUYS

Fair environment but complex and expensive to start-up and run a business

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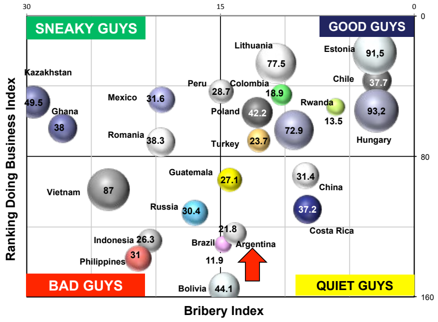
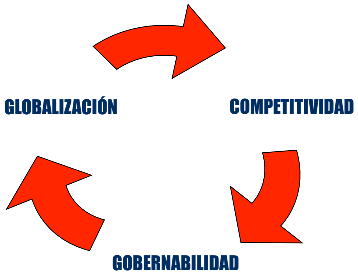
Government and Performance



CORRUPTION PERCEPTIONS INDEX RANKING

Source: Transparency International.

Globalización – Competitividad – Gobernabilidad



gcg.universia.net

DUBAI

¿Son estos tiempos difíciles?

- ❖ La bolsa de valores cayó un 50 porciento
- ❖ Los bancos están en problemas y han restringido los préstamos
- ❖ Los analistas predicen quiebras industriales generalizadas
- ❖ El desempleo aumenta rápidamente
- ❖ Las tasas de interés son volatiles

Titulares

The Milken Institute

La nueva normal … en el 2009

> "El panorama de los negocios ha cambiado de manera fundamental; el medio ambiente de mañana será diferente, pero no menos rico en posibilidades para aquellos que están preparados."

Ian Davis
Director mundial de gestión de McKinsey

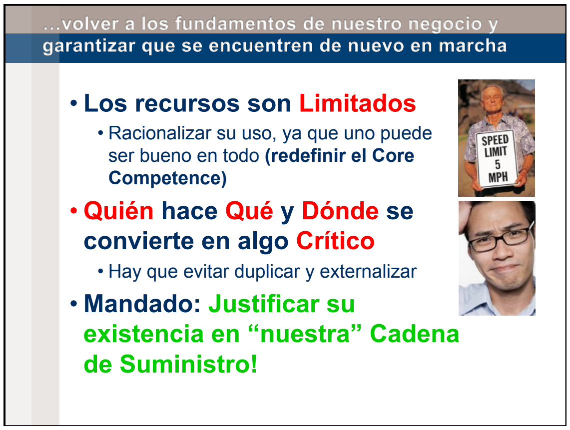
MARZO 2009

Reacciones …

Estoy de acuerdo co [illegible] mo lugar cuando esto termine. Al contrario de los que piensan que este es el fin del capitalismo, creo que este es un gran ejemplo de la destrucción creativa en acción. Esto fue una sorpresa para el mundo corporativo. Cada uno de nosotros tenemos que volver a los fundamentos de nuestro negocio y ase [illegible] Las empresas que sobreviven son las que eli [illegible] los costos estructurales. Esto [illegible] oportunidades que la crisis va [illegible]

…volver a los fundamentos de nuestro negocio y garantizar que se encuentren de nuevo en marcha …

Mehmet Demir
Director Asociado de Finanzas, Procter
Ginebra, Suiza
Marzo 12, 2009



…volver a los fundamentos de nuestro negocio y garantizar que se encuentren de nuevo en marcha

- **Los recursos son Limitados**
  - Racionalizar su uso, ya que uno puede ser bueno en todo **(redefinir el Core Competence)**
- **Quién hace Qué y Dónde se convierte en algo Crítico**
  - Hay que evitar duplicar y externalizar
- **Mandado: Justificar su existencia en "nuestra" Cadena de Suministro!**

Cambio de Enfoque Gerencial: De Vertical a Horizontal

Vertical

Horizontal

Olas de Evolución …

56

Waves of Evolution

1) Operations/Manuf. as Core

2) Marketing as King

3) Supply Chain as Mediator

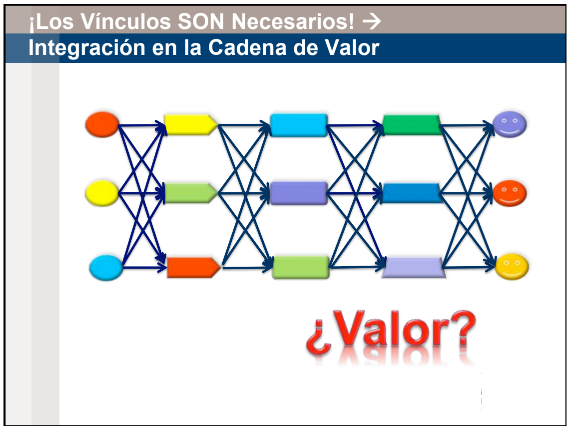
4) Innovation as Accelerator

… todos lidiando con el mismo problema …

VARIABILIDAD!

Evitar la Mentalidad de "Silos"

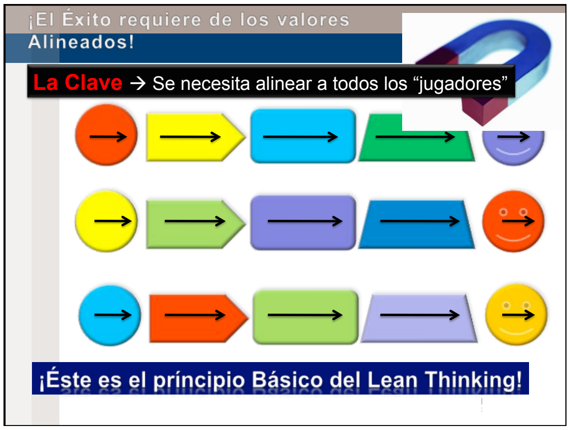
¿Valor?



¡Los Vínculos SON Necesarios! → Integración en la Cadena de Valor

¿Valor?

¿Están los Valores Alineados?



¡El Éxito requiere de los valores Alineados!

La Clave → Se necesita alinear a todos los "jugadores"

¡Éste es el príncipio Básico del Lean Thinking!

CHALLENGE

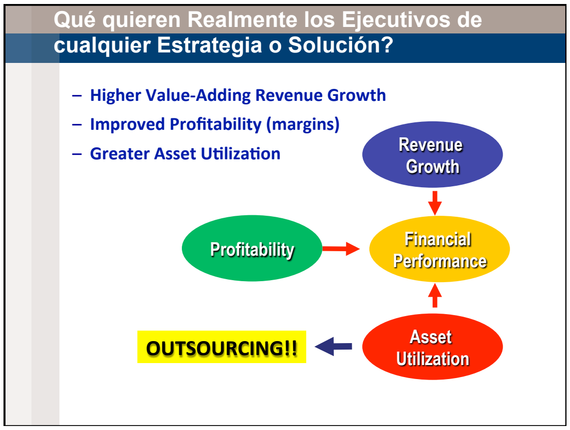
②

Global Supply Chain Strategies

Compitiendo por todo con todos de todas partes!

COMPETENCIA

Objetivo # 1 de TODA Empresa?



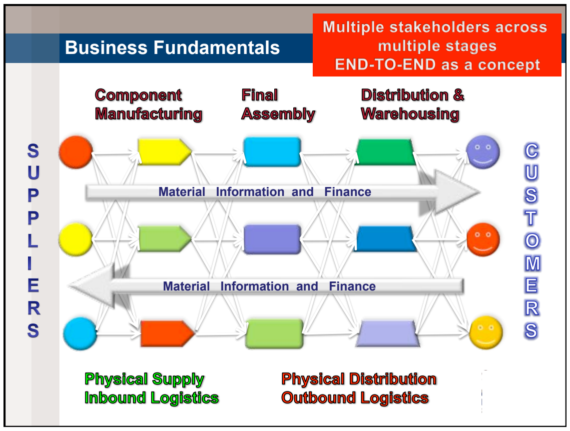
Qué quieren Realmente los Ejecutivos de cualquier Estrategia o Solución?

- Higher Value-Adding Revenue Growth
- Improved Profitability (margins)
- Greater Asset Utilization

Entonces, Qué Queremos Hacer?

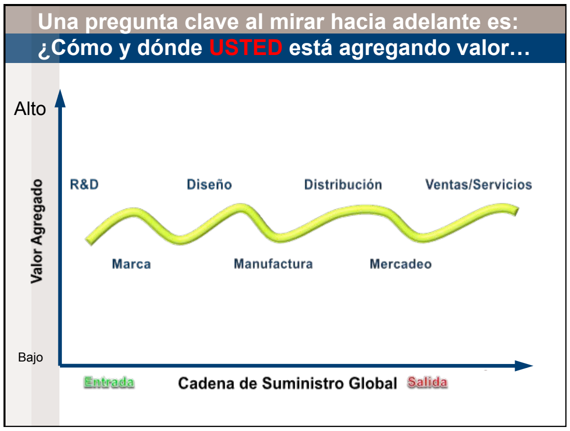
- Increase Revenues, Margins, Profits or Market Share? → TODO?

Winning is the name of the Game

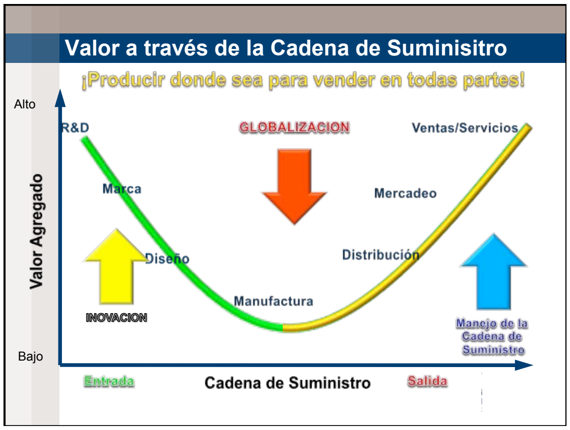


Business Fundamentals

Multiple stakeholders across multiple stages END-TO-END as a concept

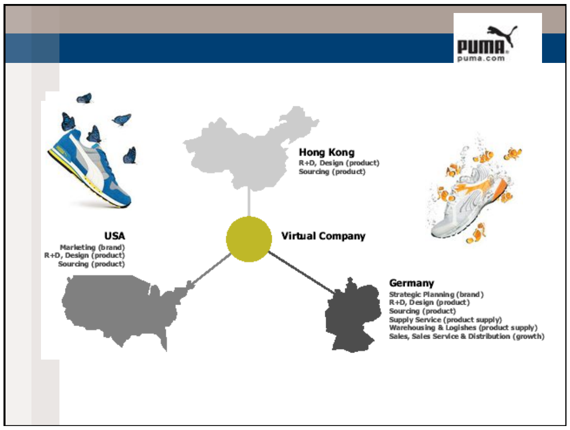


Una pregunta clave al mirar hacia adelante es: ¿Cómo y dónde USTED está agregando valor…



Valor a través de la Cadena de Suminisitro

¡Producir donde sea para vender en todas partes!



Hong Kong
R+D, Design (product)
Sourcing (product)

Virtual Company

USA
Marketing (brand)
R+D, Design (product)
Sourcing (product)

Germany
Strategic Planning (brand)
R+D, Design (product)
Sourcing (product)
Supply Service (product supply)
Warehousing & Logishes (product supply)
Sales, Sales Service & Distribution (growth)

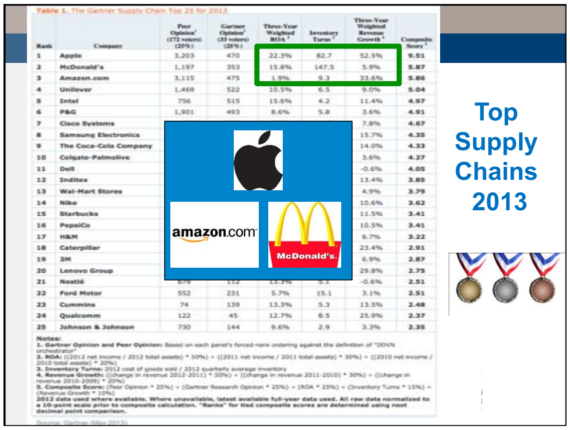


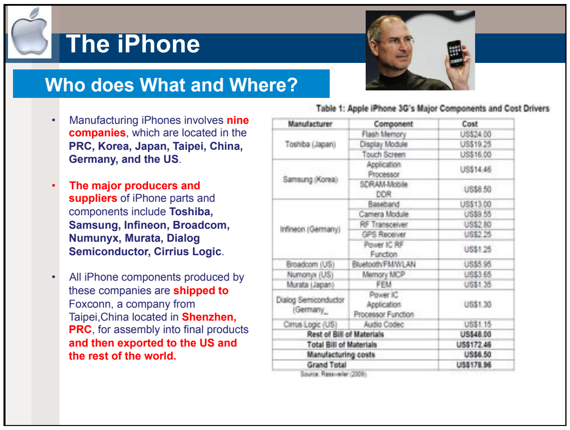
Table 1. The Gartner Supply Chain Top 25 for 2013

Rank	Company	Peer Opinion[1] (172 voters) (25%)	Gartner Opinion[1] (33 voters) (25%)	Three-Year Weighted ROA[2]	Inventory Turns[3]	Three-Year Weighted Revenue Growth[4]	Composite Score[5]
1	Apple	3,203	470	22.3%	82.7	52.5%	9.51
2	McDonald's	1,197	353	15.8%	147.5	5.9%	5.87
3	Amazon.com	3,115	475	1.9%	9.3	33.6%	5.86
4	Unilever	1,469	522	10.5%	6.5	9.0%	5.04
5	Intel	756	515	15.6%	4.2	11.4%	4.97
6	P&G	1,901	493	8.6%	5.8	3.6%	4.91
7	Cisco Systems					7.8%	4.67
8	Samsung Electronics					15.7%	4.35
9	The Coca-Cola Company					14.0%	4.33
10	Colgate-Palmolive					3.6%	4.27
11	Dell					-0.6%	4.05
12	Inditex					13.4%	3.85
13	Wal-Mart Stores					4.9%	3.79
14	Nike					10.6%	3.62
15	Starbucks					11.5%	3.41
16	PepsiCo					10.5%	3.41
17	H&M					6.7%	3.22
18	Caterpillar					23.4%	2.91
19	3M					6.9%	2.87
20	Lenovo Group					29.8%	2.75
21	Nestlé	679	112	13.3%	5.1	-0.6%	2.51
22	Ford Motor	552	231	5.7%	15.1	3.1%	2.51
23	Cummins	74	139	13.3%	5.3	13.5%	2.48
24	Qualcomm	122	45	12.7%	8.5	25.9%	2.37
25	Johnson & Johnson	730	144	9.6%	2.9	3.3%	2.35

Notes:
1. Gartner Opinion and Peer Opinion: Based on each panel's forced-rank ordering against the definition of "DDVN orchestrator"
2. ROA: ((2012 net income / 2012 total assets) * 50%) + ((2011 net income / 2011 total assets) * 30%) + ((2010 net income / 2010 total assets) * 20%)
3. Inventory Turns: 2012 cost of goods sold / 2012 quarterly average inventory
4. Revenue Growth: ((change in revenue 2012-2011) * 50%) + ((change in revenue 2011-2010) * 30%) + ((change in revenue 2010-2009) * 20%)
5. Composite Score: (Peer Opinion * 25%) + (Gartner Research Opinion * 25%) + (ROA * 25%) + (Inventory Turns * 15%) + (Revenue Growth * 10%)
2012 data used where available. Where unavailable, latest available full-year data used. All raw data normalized to a 10-point scale prior to composite calculation. "Ranks" for tied composite scores are determined using next decimal point comparison.

Source: Gartner (May 2013)

Top Supply Chains 2013



The iPhone

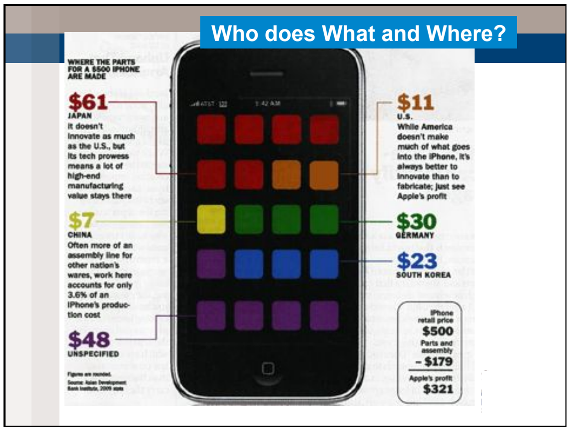
Who does What and Where?

- Manufacturing iPhones involves **nine companies**, which are located in the **PRC, Korea, Japan, Taipei, China, Germany, and the US**.
- **The major producers and suppliers** of iPhone parts and components include **Toshiba, Samsung, Infineon, Broadcom, Numunyx, Murata, Dialog Semiconductor, Cirrius Logic**.
- All iPhone components produced by these companies are **shipped to** Foxconn, a company from Taipei,China located in **Shenzhen, PRC**, for assembly into final products **and then exported to the US and the rest of the world.**

Table 1: Apple iPhone 3G's Major Components and Cost Drivers

Manufacturer	Component	Cost
Toshiba (Japan)	Flash Memory	US$24.00
	Display Module	US$19.25
	Touch Screen	US$16.00
Samsung (Korea)	Application Processor	US$14.46
	SDRAM-Mobile DDR	US$8.50
Infineon (Germany)	Baseband	US$13.00
	Camera Module	US$9.55
	RF Transceiver	US$2.80
	GPS Receiver	US$2.25
	Power IC RF Function	US$1.25
Broadcom (US)	Bluetooth/FM/WLAN	US$5.95
Numonyx (US)	Memory MCP	US$3.65
Murata (Japan)	FEM	US$1.35
Dialog Semiconductor (Germany_	Power IC Application Processor Function	US$1.30
Cirrus Logic (US)	Audio Codec	US$1.15
Rest of Bill of Materials		**US$48.00**
Total Bill of Materials		**US$172.46**
Manufacturing costs		**US$6.50**
Grand Total		**US$178.96**

Source: Rassweiler (2009)



Who does What and Where?

WHERE THE PARTS FOR A $500 IPHONE ARE MADE

$61 JAPAN
It doesn't innovate as much as the U.S., but its tech prowess means a lot of high-end manufacturing value stays there

$7 CHINA
Often more of an assembly line for other nation's wares, work here accounts for only 3.6% of an iPhone's production cost

$48 UNSPECIFIED

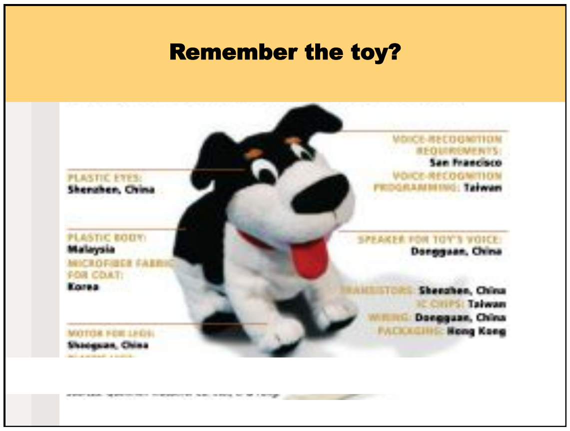
$11 U.S.
While America doesn't make much of what goes into the iPhone, it's always better to innovate than to fabricate; just see Apple's profit

$30 GERMANY

$23 SOUTH KOREA

iPhone retail price **$500**
Parts and assembly **– $179**
Apple's profit **$321**

Figures are rounded.
Source: Asian Development Bank Institute, 2009 data



Remember the toy?

PLASTIC EYES: **Shenzhen, China**
PLASTIC BODY: **Malaysia**
MICROFIBER FABRIC FOR COAT: **Korea**
MOTOR FOR LEGS: **Shaoguan, China**
VOICE-RECOGNITION REQUIREMENTS: **San Francisco**
VOICE-RECOGNITION PROGRAMMING: **Taiwan**
SPEAKER FOR TOY'S VOICE: **Dongguan, China**
TRANSISTORS: **Shenzhen, China**
IC CHIPS: **Taiwan**
WIRING: **Dongguan, China**
PACKAGING: **Hong Kong**

Li & Fung

It will coordinate all activities that go into making a toy or a parka

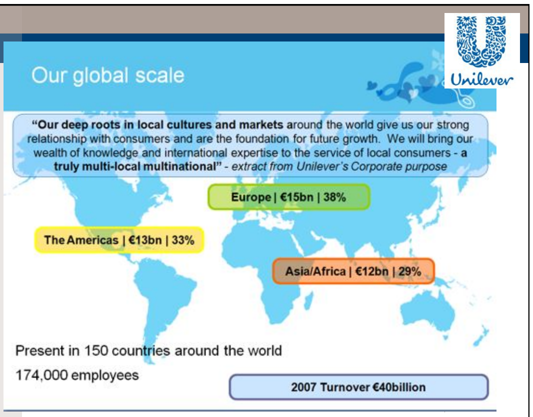
WOW!

Orientación Empresarial Global

	Bajo	Alto
Alto	Global	GLOCAL
Bajo	Local	Multi-Nacional

Presión para integración global

Presión por respuesta local



Our global scale

"**Our deep roots in local cultures and markets** around the world give us our strong relationship with consumers and are the foundation for future growth. We will bring our wealth of knowledge and international expertise to the service of local consumers - **a truly multi-local multinational**" - *extract from Unilever's Corporate purpose*

Europe | €15bn | 38%

The Americas | €13bn | 33%

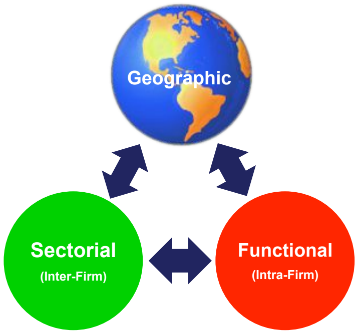
Asia/Africa | €12bn | 29%

Present in 150 countries around the world

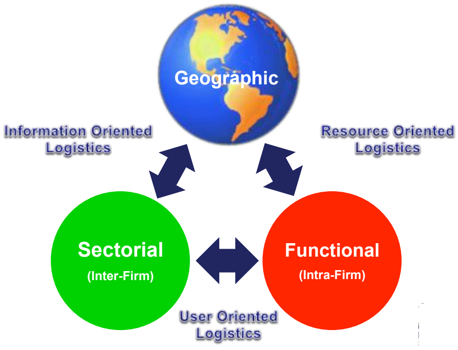
174,000 employees

2007 Turnover €40billion

Global Supply Chain Framework



There is more than one type of logistics



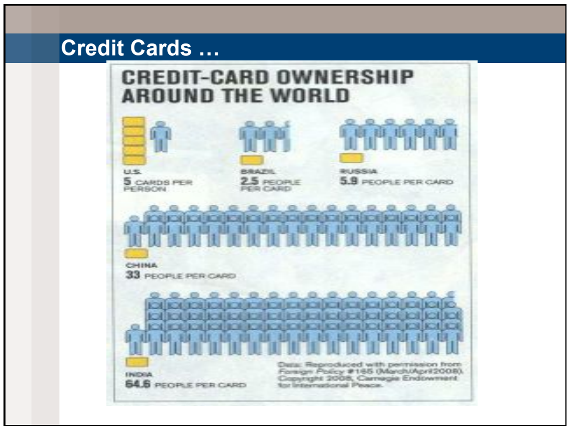
Algunas fuerzas que moldean la evolución de las cadenas de suministro

- **Globalización y Alianzas Económicas Regionales (e.j., EU, NAFTA, MercoSur, FTAA)**
- **Regulaciones gubernamentales (e.j., contenido y restricciones de importación)**
- **La technología advanza muy rápidamente (e.j., RFID)**
- **CHINA: Un productor convirtiéndose en cliente**
- **INDIA: Un poderoso software**
- **Mejoramiento de Infrastructura (e.j.,plataformas combinadas)**
- **El desempeño financiero es muy importante (e.j., rentabilidad y sostenibilidad más que la cuota de mercado)**
- **Preocupación Ambiental y Responsabilidad Social (e.j., mas conciencia)**
- **El aumento de la incertidumbre (e.j, riesgos políticos, el terrorismo, la volatilidad del tipo de cambio, los desastres naturales)**

Ford has only ever produced 30 million cars.
By 2020 China will have 150 million cars.

TRANSPORT TALLIES
The impact of trucking and shipping is stated in pounds of CO_2 equivalent, an expression of greenhouse gas effects. Calculations apply to a 750 milliliter glass bottle of average weight. The width of a route proportionally represents its pounds of CO_2 equivalent.

Credit Cards …



Data: Reproduced with permission from Foreign Policy #165 (March/April2008). Copyright 2008, Carnegie Endowment for International Peace.

Global Operational Fitness requires embracing Global Supply Chain Management

Why is it Important?

SCM takes a new context …

A ne… valu… vering …-TO-END

Com… ything!

My Supply Chain against your Supply Chain rather than my Company against your Company

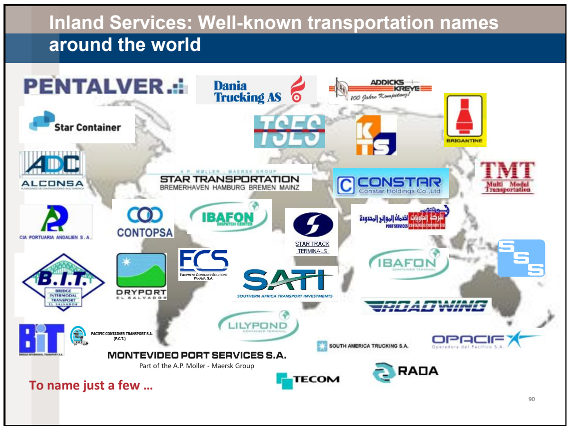
Competing with everyone from everywhere for everything!

Business Fundamentals

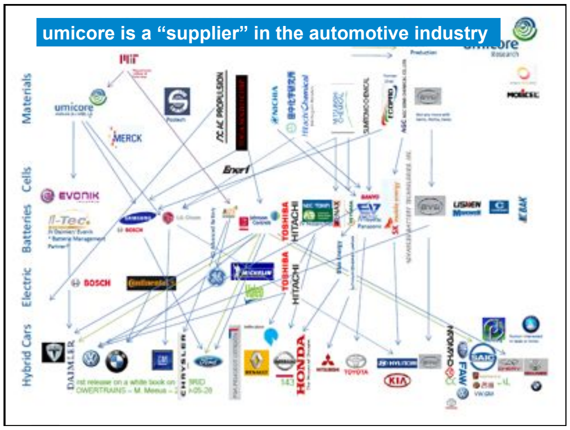
Multiple stakeholders across multiple stages END-TO-END as a concept

Who does What Where?

Inland Services: Well-known transportation names around the world



To name just a few …

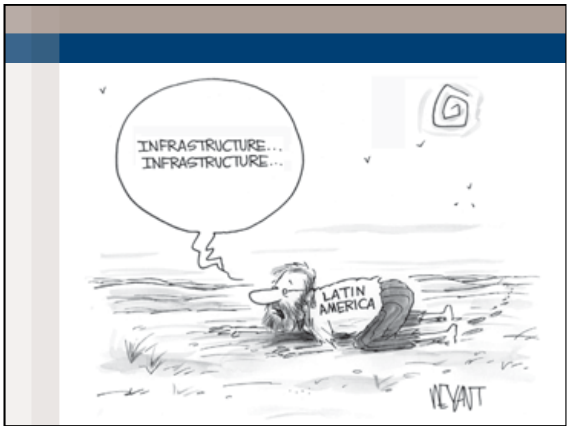


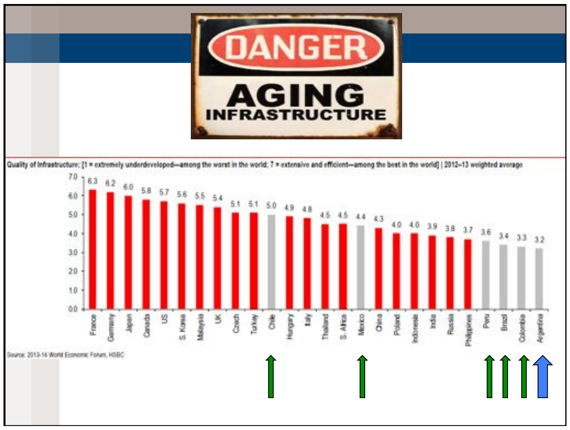
umicore is a “supplier” in the automotive industry

Our Supply Chain
against Your Supply Chain

CHALLENGE

④





Quality of Infrastructure: [1 = extremely underdeveloped—among the worst in the world; 7 = extensive and efficient—among the best in the world] | 2012-13 weighted average

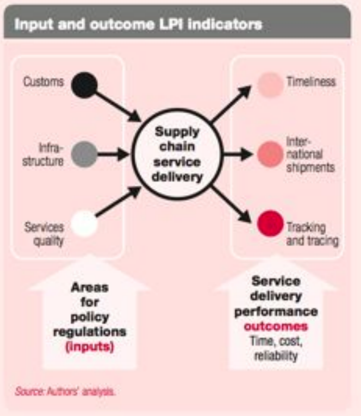
France	6.3
Germany	6.2
Japan	6.0
Canada	5.8
US	5.7
S. Korea	5.6
Malaysia	5.5
UK	5.4
Czech	5.1
Turkey	5.1
Chile	5.0
Hungary	4.9
Italy	4.8
Thailand	4.5
S. Africa	4.5
Mexico	4.4
China	4.3
Poland	4.0
Indonesia	4.0
India	3.9
Russia	3.8
Philippines	3.7
Peru	3.6
Brazil	3.4
Colombia	3.3
Argentina	3.2

Source: 2013-14 World Economic Forum, HSBC

Co 14

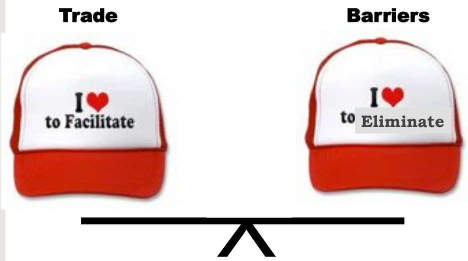
Tra my

The L tors



Source: Authors' analysis.

Cuál es más importante a nivel Global?



Box 1.4 Benefits of trade facilitation—findings from the World Economic Forum's 2013 *Enabling Trade* Report

Trade Facilitation increases $2.6 Trillion in Global GDP (4.7%) and $1.6 Trillion in Global Trade (14.5%)

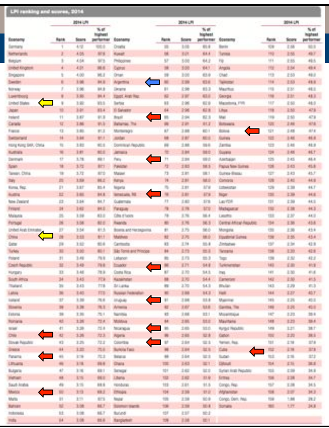
Complete Tariff Elimination would only add $400 Billion to global GDP and $1.1 trillion to Global Trade (10.1%)

of a more modest improvement in trade facilitation, in which all countries raised their performance halfway to regional best prac-

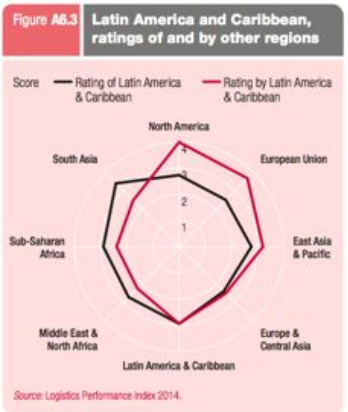
West Asia. Gains from tariff elimination would accrue dispro-portionately to the Russian Federation, China, and a few other countries.

GDP and trade are expressed at constant prices.

Source: World Economic Forum 2013.

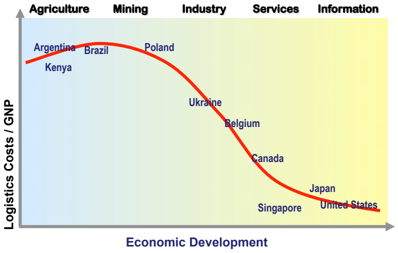


LPI ranking and scores, 2014

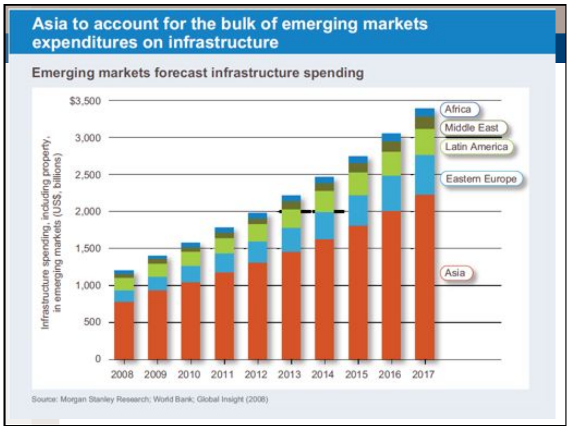


Source: Logistics Performance Index 2014.

Logistics Costs and Competitiveness



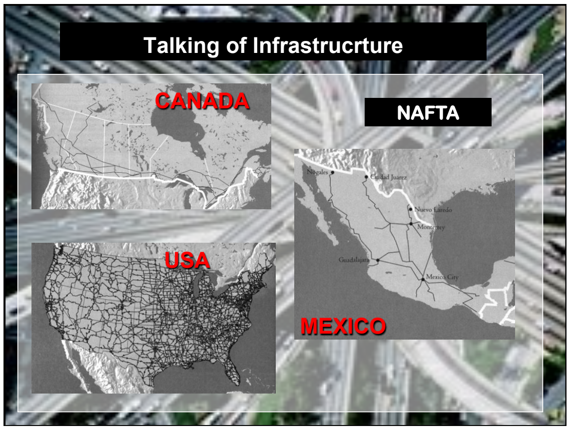
Adapted from P.O Roberts, Supply Chain Management: New Directions for Developing Economies, http://www.worldbank.org/html/fpd/transport/ports/trf_docs/new_dir.pdf



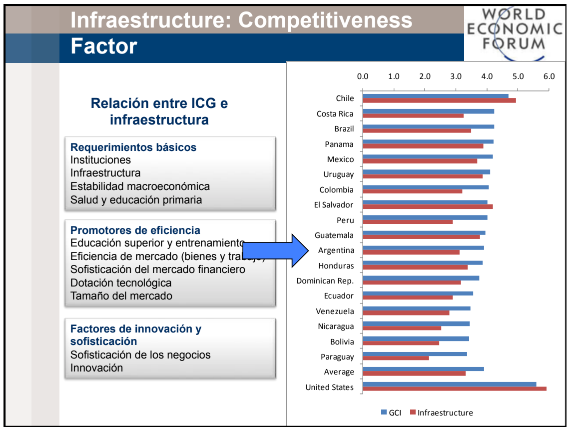
Asia to account for the bulk of emerging markets expenditures on infrastructure

Emerging markets forecast infrastructure spending

Source: Morgan Stanley Research; World Bank; Global Insight (2008)



Talking of Infrastrucrture



Infraestructure: Competitiveness Factor

WORLD ECONOMIC FORUM

Relación entre ICG e infraestructura

Requerimientos básicos
Instituciones
Infraestructura
Estabilidad macroeconómica
Salud y educación primaria

Promotores de eficiencia
Educación superior y entrenamiento
Eficiencia de mercado (bienes y trabajo)
Sofisticación del mercado financiero
Dotación tecnológica
Tamaño del mercado

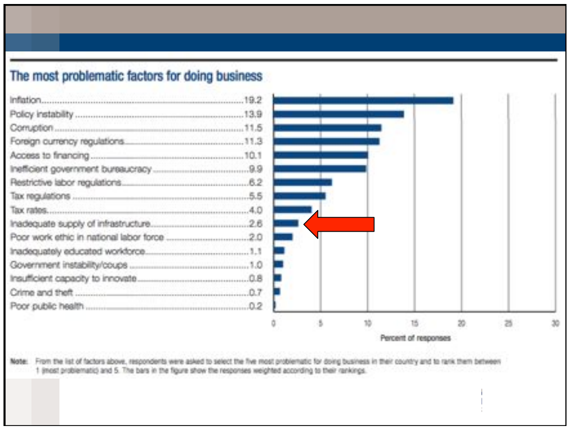
Factores de innovación y sofisticación
Sofisticación de los negocios
Innovación

The Global Competitiveness Report 2013–2014

Latin America and the Caribbean

A skills and innovation gap holds back Latin America's productivity potential.

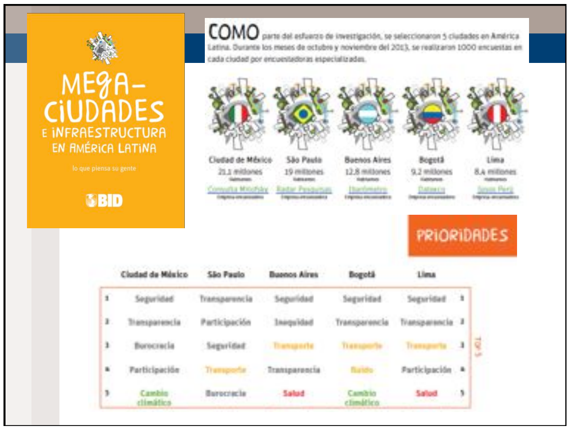
Y Argentina?



The most problematic factors for doing business

Inflation	19.2
Policy instability	13.9
Corruption	11.5
Foreign currency regulations	11.3
Access to financing	10.1
Inefficient government bureaucracy	9.9
Restrictive labor regulations	6.2
Tax regulations	5.5
Tax rates	4.0
Inadequate supply of infrastructure	2.6
Poor work ethic in national labor force	2.0
Inadequately educated workforce	1.1
Government instability/coups	1.0
Insufficient capacity to innovate	0.8
Crime and theft	0.7
Poor public health	0.2

Note: From the list of factors above, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.



MEGA-CIUDADES E INFRAESTRUCTURA EN AMÉRICA LATINA

lo que piensa su gente

BID

COMO parte del esfuerzo de investigación, se seleccionaron 5 ciudades en América Latina. Durante los meses de octubre y noviembre del 2013, se realizaron 1000 encuestas en cada ciudad por encuestadoras especializadas.

Ciudad de México	São Paulo	Buenos Aires	Bogotá	Lima
21.1 millones	19 millones	12.8 millones	9.2 millones	8.4 millones
Consulta Mitofsky	Radar Pesquisas	Ibarómetro	Datexco	Ipsos Perú

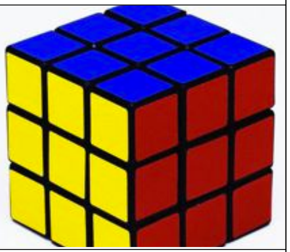
PRIORIDADES

	Ciudad de México	São Paulo	Buenos Aires	Bogotá	Lima	
1	Seguridad	Transparencia	Seguridad	Seguridad	Seguridad	1
2	Transparencia	Participación	Inequidad	Transparencia	Transparencia	2
3	Burocracia	Seguridad	Transporte	Transporte	Transporte	3
4	Participación	Transporte	Transparencia	Ruido	Participación	4
5	Cambio climático	Burocracia	Salud	Cambio climático	Salud	5

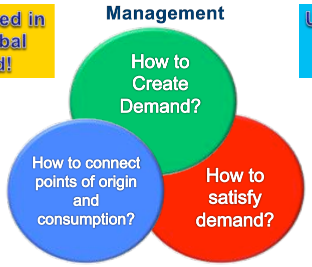
Top 5

SOLUTION

①



Some Problems … and Some Solutions …



Aggravated in the Global World!

Understand the Linkages!

Demand Management

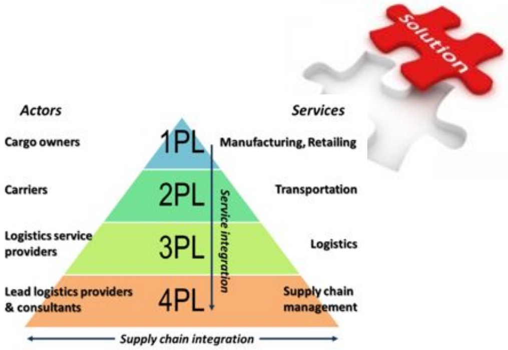
How to Create Demand?

How to connect points of origin and consumption?

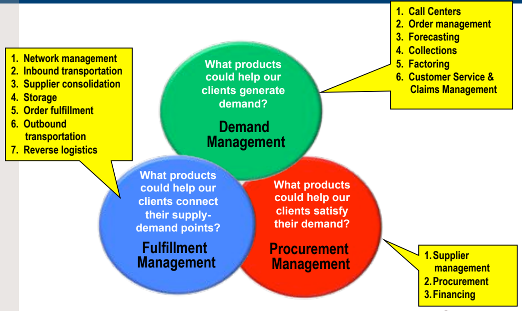
How to satisfy demand?

Fulfillment Management

Procurement Management



Diseñar el Portafolio de Productos



1. Network management
2. Inbound transportation
3. Supplier consolidation
4. Storage
5. Order fulfillment
6. Outbound transportation
7. Reverse logistics

What products could help our clients generate demand?

Demand Management

1. Call Centers
2. Order management
3. Forecasting
4. Collections
5. Factoring
6. Customer Service & Claims Management

What products could help our clients connect their supply-demand points?

Fulfillment Management

What products could help our clients satisfy their demand?

Procurement Management

1. Supplier management
2. Procurement
3. Financing

pwc

Global Supply Chain Survey 2013

This year's global supply chain survey by PwC shows how Leaders are moving ahead of the pack. They're tailoring their supply chains to customer needs and investing in next-generation capabilities while keeping the focus on supply chains that are both fast and efficient

Next-generation supply chains

Efficient, fast and tailored

PRICEWATERHOUSECOOPERS

Seis mensajes claros!

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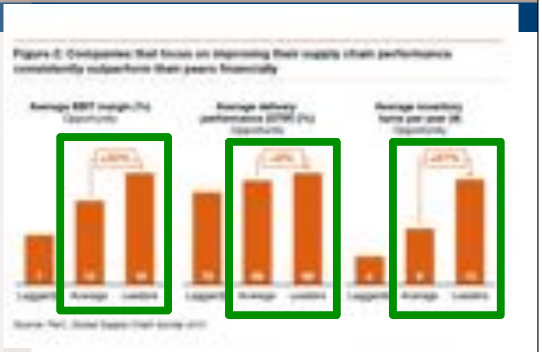
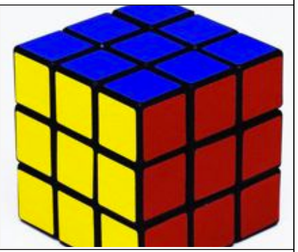


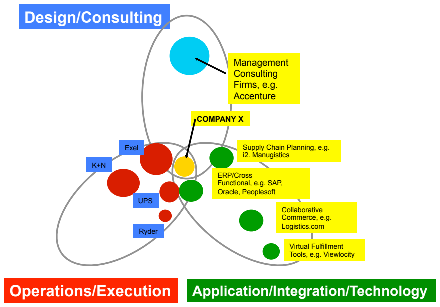
SOLUTION ②



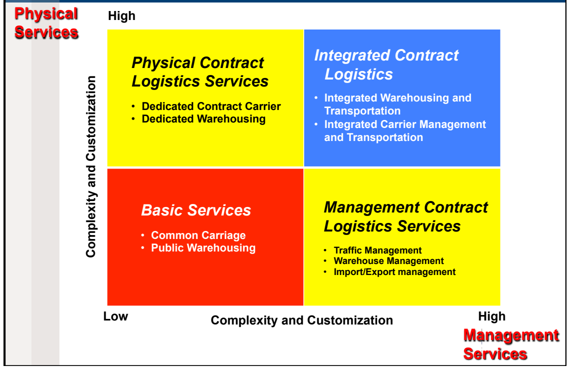
Es importante "desagregar" el análisis!

Una Solucion Unica es muy arriesgado: utilizar la estrategia correcta de la cadena de suministro para el producto correcto, el mercado y el tiempo.

Definir el "espacio" Competitivo



Clasificación de Servicios



Physical Services

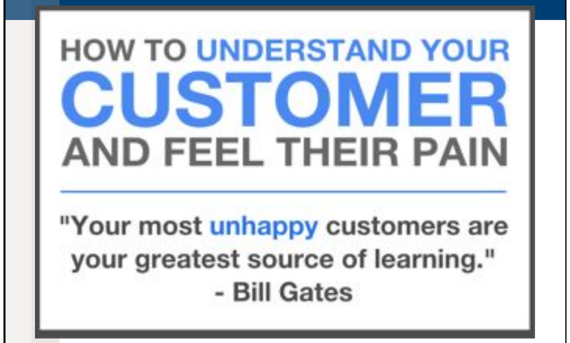
High

Complexity and Customization

Physical Contract Logistics Services • Dedicated Contract Carrier • Dedicated Warehousing	***Integrated Contract Logistics*** • Integrated Warehousing and Transportation • Integrated Carrier Management and Transportation
Basic Services • Common Carriage • Public Warehousing	***Management Contract Logistics Services*** • Traffic Management • Warehouse Management • Import/Export management

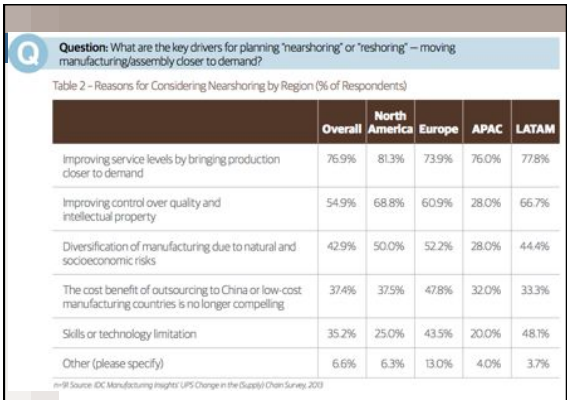
Low Complexity and Customization High

Management Services



HOW TO UNDERSTAND YOUR CUSTOMER AND FEEL THEIR PAIN

"Your most unhappy customers are your greatest source of learning."
- Bill Gates

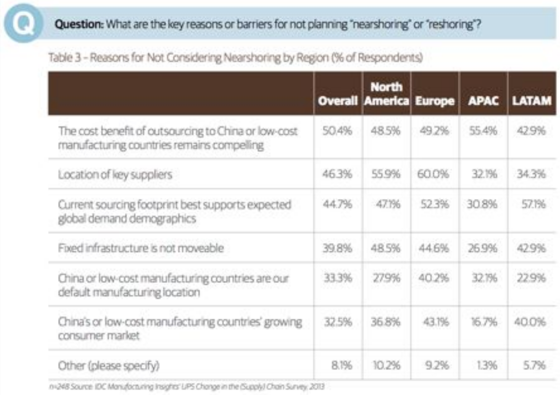


Question: What are the key drivers for planning "nearshoring" or "reshoring" – moving manufacturing/assembly closer to demand?

Table 2 – Reasons for Considering Nearshoring by Region (% of Respondents)

	Overall	North America	Europe	APAC	LATAM
Improving service levels by bringing production closer to demand	76.9%	81.3%	73.9%	76.0%	77.8%
Improving control over quality and intellectual property	54.9%	68.8%	60.9%	28.0%	66.7%
Diversification of manufacturing due to natural and socioeconomic risks	42.9%	50.0%	52.2%	28.0%	44.4%
The cost benefit of outsourcing to China or low-cost manufacturing countries is no longer compelling	37.4%	37.5%	47.8%	32.0%	33.3%
Skills or technology limitation	35.2%	25.0%	43.5%	20.0%	48.1%
Other (please specify)	6.6%	6.3%	13.0%	4.0%	3.7%

n=91 Source: IDC Manufacturing Insights' UPS Change in the (Supply) Chain Survey, 2013



Question: What are the key reasons or barriers for not planning "nearshoring" or "reshoring"?

Table 3 – Reasons for Not Considering Nearshoring by Region (% of Respondents)

	Overall	North America	Europe	APAC	LATAM
The cost benefit of outsourcing to China or low-cost manufacturing countries remains compelling	50.4%	48.5%	49.2%	55.4%	42.9%
Location of key suppliers	46.3%	55.9%	60.0%	32.1%	34.3%
Current sourcing footprint best supports expected global demand demographics	44.7%	47.1%	52.3%	30.8%	57.1%
Fixed infrastructure is not moveable	39.8%	48.5%	44.6%	26.9%	42.9%
China or low-cost manufacturing countries are our default manufacturing location	33.3%	27.9%	40.2%	32.1%	22.9%
China's or low-cost manufacturing countries' growing consumer market	32.5%	36.8%	43.1%	16.7%	40.0%
Other (please specify)	8.1%	10.2%	9.2%	1.3%	5.7%

n=248 Source: IDC Manufacturing Insights' UPS Change in the (Supply) Chain Survey, 2013

Uno de los problemas …

"… **indirect spending** is a large portion of the overall corporate buy, and the ability to improve the bottom line through cost reduction dwarfs the impact on revenue that is needed to achieve the same result.

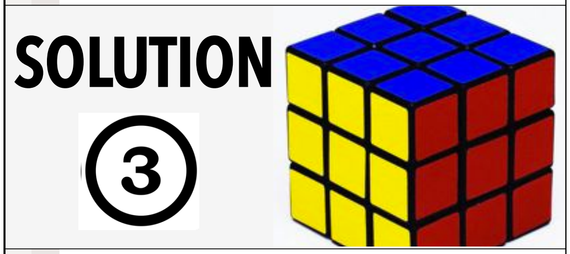
Indirect spend **can comprise between 30 and 60 percent of the average company's spending**. For companies in the professional and financial services industries, indirect spend can comprise virtually all the total spend dollars. Therefore, **sourcing professionals are constantly challenged** to improve the bottom line because of **their ability to impact the profit margin versus what is required to achieve the same effect focusing purely on revenue growth.** "

"Considere una compañía con un márgen de ganancia del 10% antes de impuestos, cada $10 en ingresos se traduce en $1 de contribución a la ganancia. **Ellos quieren aumentar la contribucion a la ganacia en $1.**

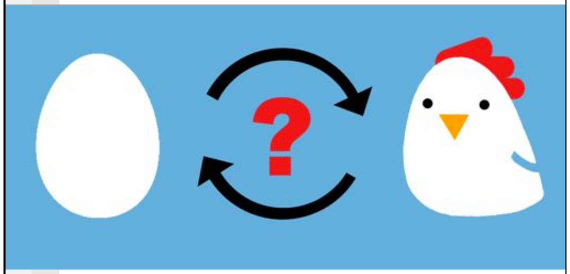
Podria reducir costos en $1 o aumentar los ingresos $10!

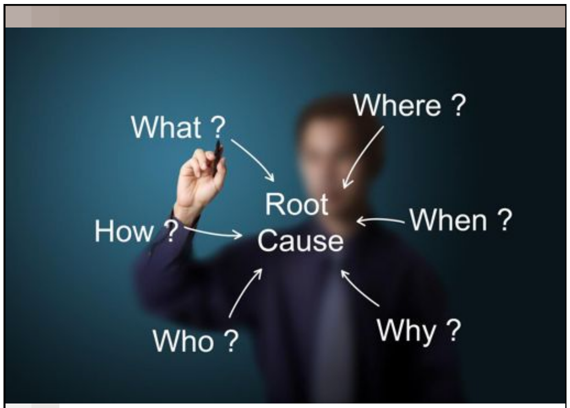
Este sencillo ejemplo ilustra porque los **profesionales en logistica tienen que satisfacer resultdos de corto plazo en lugar de aumentar los ingresos al largo plazo.**"

Source: UPS Indirect procurement outsourcing – why, how and when

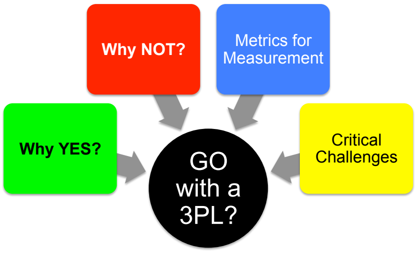


Sintomas o Causas de una mala relación?





Simple metodología de Evaluación



Why NOT?

Metrics for Measurement

Why YES?

GO with a 3PL?

Critical Challenges

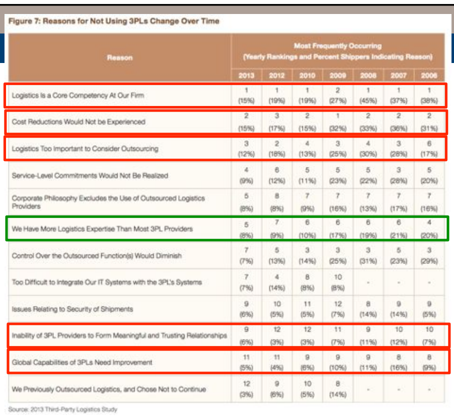


Figure 7: Reasons for Not Using 3PLs Change Over Time

Reason	Most Frequently Occurring (Yearly Rankings and Percent Shippers Indicating Reason)						
	2013	2012	2010	2009	2008	2007	2006
Logistics Is a Core Competency At Our Firm	1 (15%)	1 (19%)	1 (19%)	2 (27%)	1 (45%)	1 (37%)	1 (38%)
Cost Reductions Would Not be Experienced	2 (15%)	3 (17%)	2 (15%)	1 (32%)	2 (33%)	2 (36%)	2 (31%)
Logistics Too Important to Consider Outsourcing	3 (12%)	2 (18%)	4 (13%)	3 (25%)	4 (30%)	3 (28%)	6 (17%)
Service-Level Commitments Would Not Be Realized	4 (9%)	6 (12%)	5 (11%)	5 (23%)	5 (22%)	3 (28%)	5 (20%)
Corporate Philosophy Excludes the Use of Outsourced Logistics Providers	5 (8%)	8 (8%)	7 (9%)	7 (16%)	7 (13%)	7 (17%)	7 (16%)
We Have More Logistics Expertise Than Most 3PL Providers	5 (8%)	7 (9%)	6 (10%)	6 (17%)	6 (19%)	6 (21%)	4 (20%)
Control Over the Outsourced Function(s) Would Diminish	7 (7%)	5 (13%)	3 (14%)	3 (25%)	3 (31%)	5 (23%)	3 (29%)
Too Difficult to Integrate Our IT Systems with the 3PL's Systems	7 (7%)	4 (14%)	8 (8%)	10 (8%)	-	-	-
Issues Relating to Security of Shipments	9 (6%)	10 (5%)	11 (5%)	12 (7%)	8 (14%)	9 (14%)	9 (5%)
Inability of 3PL Providers to Form Meaningful and Trusting Relationships	9 (6%)	12 (3%)	12 (3%)	11 (7%)	9 (11%)	10 (12%)	10 (7%)
Global Capabilities of 3PLs Need Improvement	11 (5%)	11 (4%)	9 (6%)	9 (10%)	9 (11%)	8 (16%)	8 (9%)
We Previously Outsourced Logistics, and Chose Not to Continue	12 (3%)	9 (6%)	10 (5%)	8 (14%)	-	-	-

Source: 2013 Third-Party Logistics Study

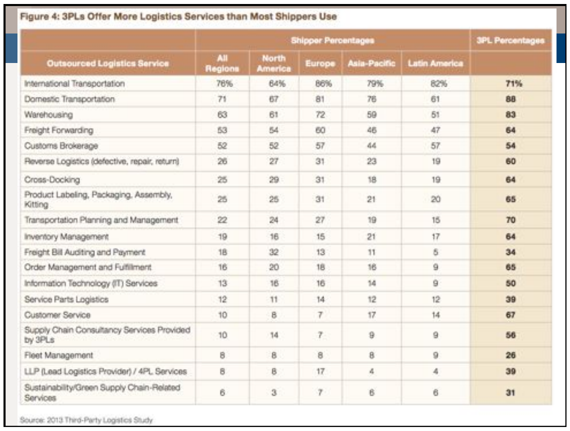


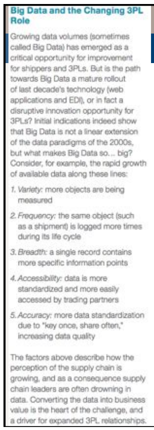
Figure 4: 3PLs Offer More Logistics Services than Most Shippers Use

	Shipper Percentages					3PL Percentages
Outsourced Logistics Service	All Regions	North America	Europe	Asia-Pacific	Latin America	
International Transportation	76%	64%	86%	79%	82%	**71%**
Domestic Transportation	71	67	81	76	61	**88**
Warehousing	63	61	72	59	51	**83**
Freight Forwarding	53	54	60	46	47	**64**
Customs Brokerage	52	52	57	44	57	**54**
Reverse Logistics (defective, repair, return)	26	27	31	23	19	**60**
Cross-Docking	25	29	31	18	19	**64**
Product Labeling, Packaging, Assembly, Kitting	25	25	31	21	20	**65**
Transportation Planning and Management	22	24	27	19	15	**70**
Inventory Management	19	16	15	21	17	**64**
Freight Bill Auditing and Payment	18	32	13	11	5	**34**
Order Management and Fulfillment	16	20	18	16	9	**65**
Information Technology (IT) Services	13	16	16	14	9	**50**
Service Parts Logistics	12	11	14	12	12	**39**
Customer Service	10	8	7	17	14	**67**
Supply Chain Consultancy Services Provided by 3PLs	10	14	7	9	9	**56**
Fleet Management	8	8	8	8	9	**26**
LLP (Lead Logistics Provider) / 4PL Services	8	8	17	4	4	**39**
Sustainability/Green Supply Chain-Related Services	6	3	7	6	6	**31**

Source: 2013 Third-Party Logistics Study

Figure 6: The "IT Gap" Stabilizing

Source: 2013 Third-Party Logistics Study



Big Data and the Changing 3PL Role

Growing data volumes (sometimes called Big Data) has emerged as a critical opportunity for improvement for shippers and 3PLs. But is the path towards Big Data a mature rollout of last decade's technology (web applications and EDI), or in fact a disruptive innovation opportunity for 3PLs? Initial indications indeed show that Big Data is not a linear extension of the data paradigms of the 2000s, but what makes Big Data so... big? Consider, for example, the rapid growth of available data along these lines:

1. *Variety:* more objects are being measured
2. *Frequency:* the same object (such as a shipment) is logged more times during its life cycle
3. *Breadth:* a single record contains more specific information points
4. *Accessibility:* data is more standardized and more easily accessed by trading partners
5. *Accuracy:* more data standardization due to "key once, share often," increasing data quality

The factors above describe how the perception of the supply chain is growing, and as a consequence supply chain leaders are often drowning in data. Converting the data into business value is the heart of the challenge, and a driver for expanded 3PL relationships.

> *"Converting the data into business value is the heart of the challenge"*

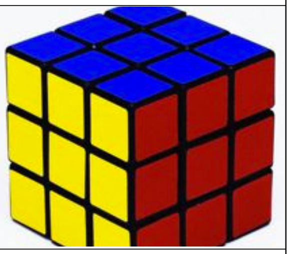
> *"While focusing on moving goods may find incremental handling economies, it will likely miss the game-changing transformational insights which come from better management of big data."*

Will Big Data present opportunities or threats to 3PLs? How can 3PLs and shippers work together to manage Big Data?

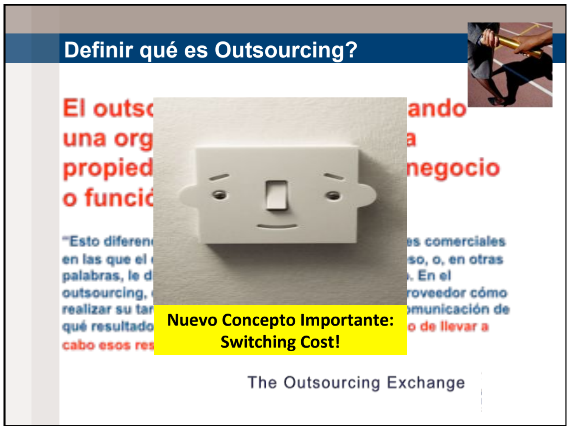
BIG DATA

SOLUTION

④



Definir qué es Outsourcing?



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qué resultado… o de llevar a
cabo esos res…

Nuevo Concepto Importante: Switching Cost!

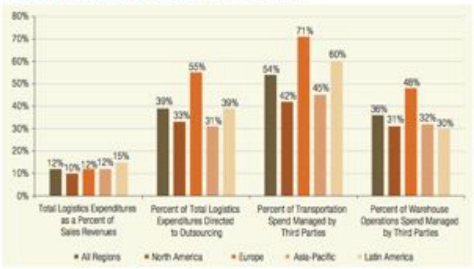
The Outsourcing Exchange

Switching Cost

Hacer el "costo de sustitución" muy alto mientras proporciona un valor agregado importante

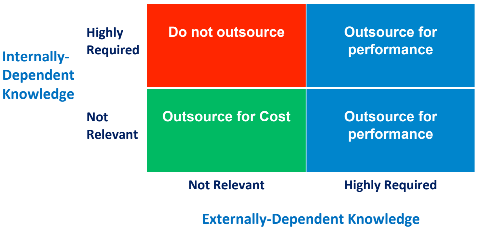
CALIBRAR EXPECTATIVAS

Figure 2: Outsourcing Spending Patterns Persist



Source: 2013 Third-Party Logistics Study

Perspectiva del Socio Potencial

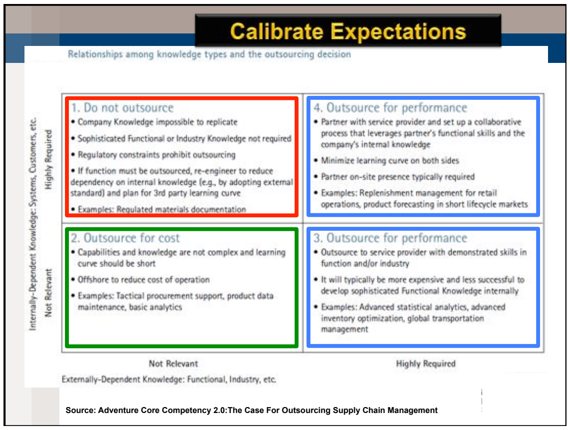


Internally-Dependent Knowledge	**Highly Required**	**Do not outsource**	**Outsource for performance**
	Not Relevant	**Outsource for Cost**	**Outsource for performance**
		Not Relevant	**Highly Required**

Externally-Dependent Knowledge

Source: Adventure Core Competency 2.0:The Case For Outsourcing Supply Chain Management

Calibrate Expectations



Relationships among knowledge types and the outsourcing decision

Internally-Dependent Knowledge: Systems, Customers, etc.		
Highly Required	1. Do not outsource • Company Knowledge impossible to replicate • Sophisticated Functional or Industry Knowledge not required • Regulatory constraints prohibit outsourcing • If function must be outsourced, re-engineer to reduce dependency on internal knowledge (e.g., by adopting external standard) and plan for 3rd party learning curve • Examples: Regulated materials documentation	4. Outsource for performance • Partner with service provider and set up a collaborative process that leverages partner's functional skills and the company's internal knowledge • Minimize learning curve on both sides • Partner on-site presence typically required • Examples: Replenishment management for retail operations, product forecasting in short lifecycle markets
Not Relevant	2. Outsource for cost • Capabilities and knowledge are not complex and learning curve should be short • Offshore to reduce cost of operation • Examples: Tactical procurement support, product data maintenance, basic analytics	3. Outsource for performance • Outsource to service provider with demonstrated skills in function and/or industry • It will typically be more expensive and less successful to develop sophisticated Functional Knowledge internally • Examples: Advanced statistical analytics, advanced inventory optimization, global transportation management
	Not Relevant	Highly Required

Externally-Dependent Knowledge: Functional, Industry, etc.

Source: Adventure Core Competency 2.0:The Case For Outsourcing Supply Chain Management

Rules for Outsourcing

1) Desarrollar una Estrategia Efectiva

2) Definir las espectativas claramente

3) Establecer un Buen Contrato

4) Medir desempeño y comunicar resultados

5) Ser un buen socio

Logistics Outsourcing: A Management Guide

Tienes que tener cuidado
si no sabes a dónde vas,
porque puede que
no llegues!

CHALLENGES

SOLUTIONS

La Logística transforma los Desafíos en
Soluciones Exitosas!

ernstr@georgetown.edu