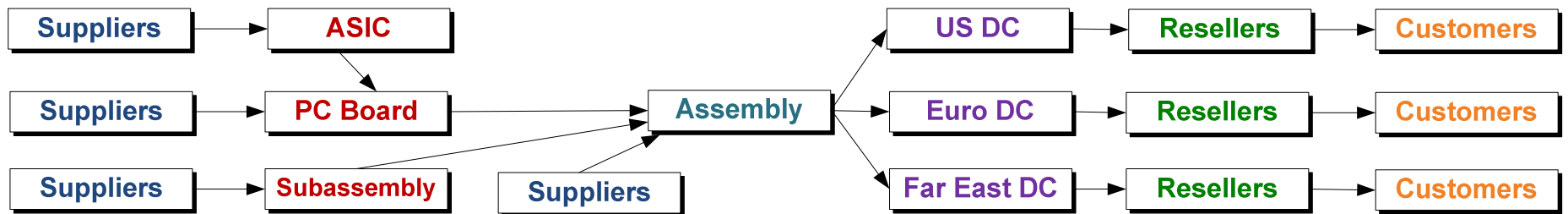
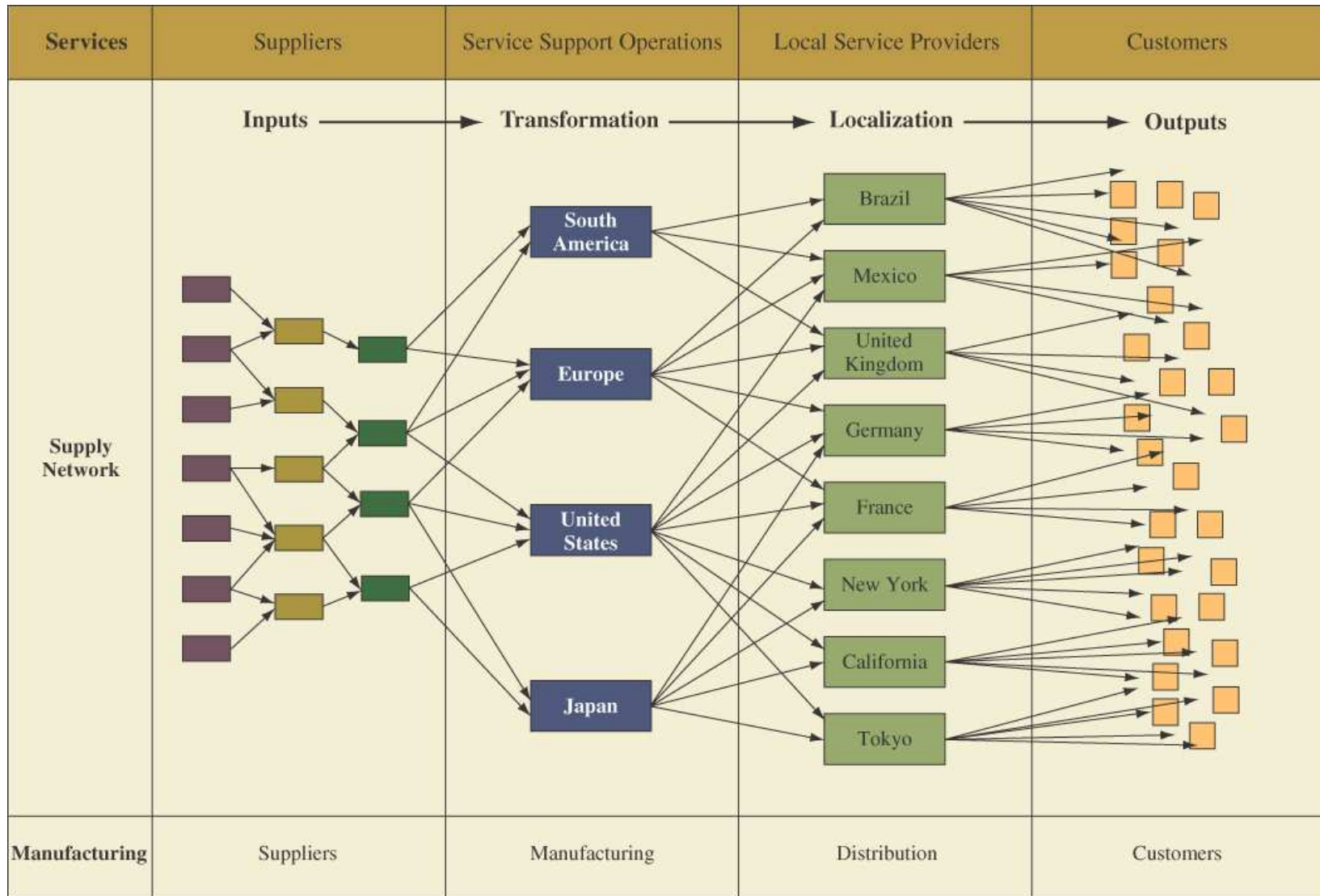


Cadena de Suministro

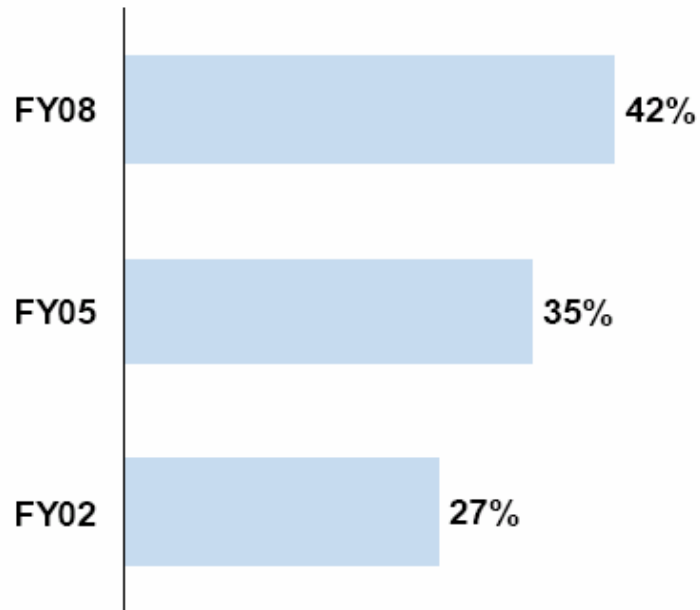


Red de Suministro

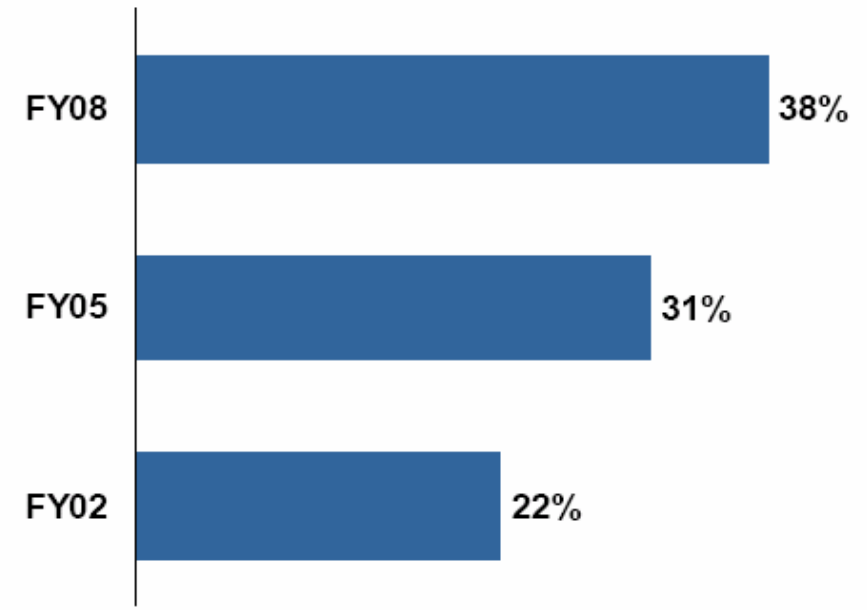


Global Sourcing

Revenue Generated Outside Home Market



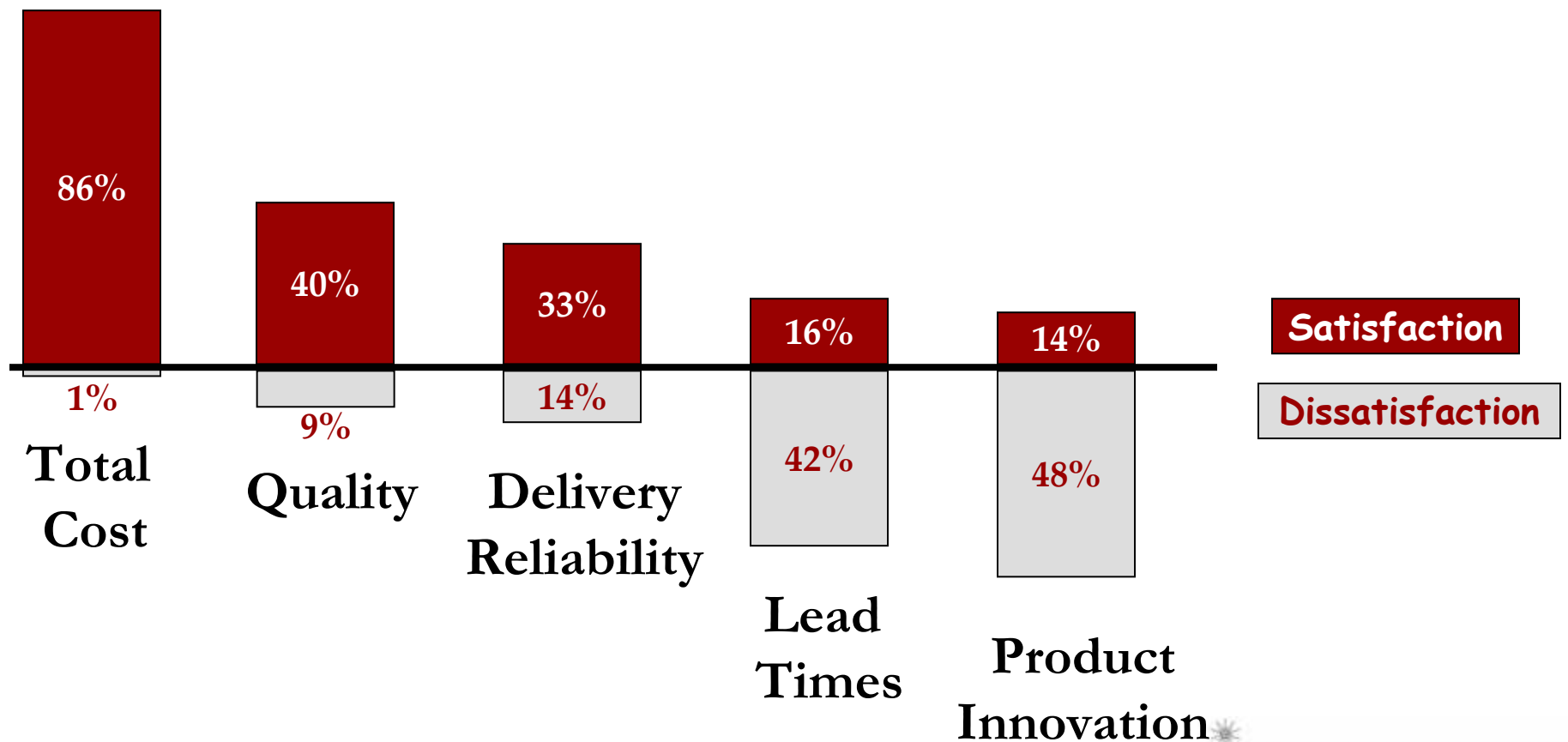
Sourcing of Raw, Semi-finished and Finished Goods Outside Home Market



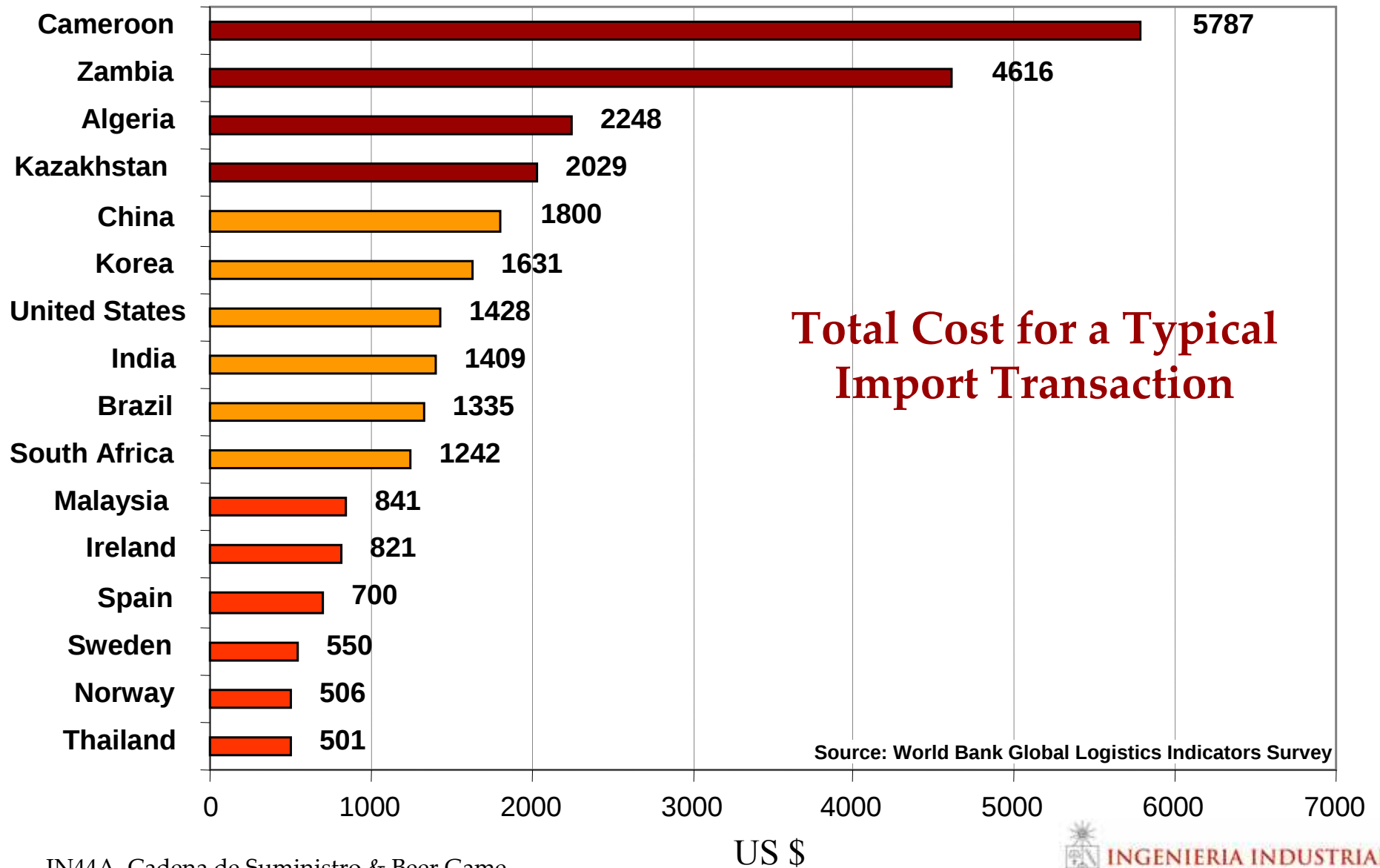
Source: Accenture Global Operations Survey, 2005

Balancing Cost and Service

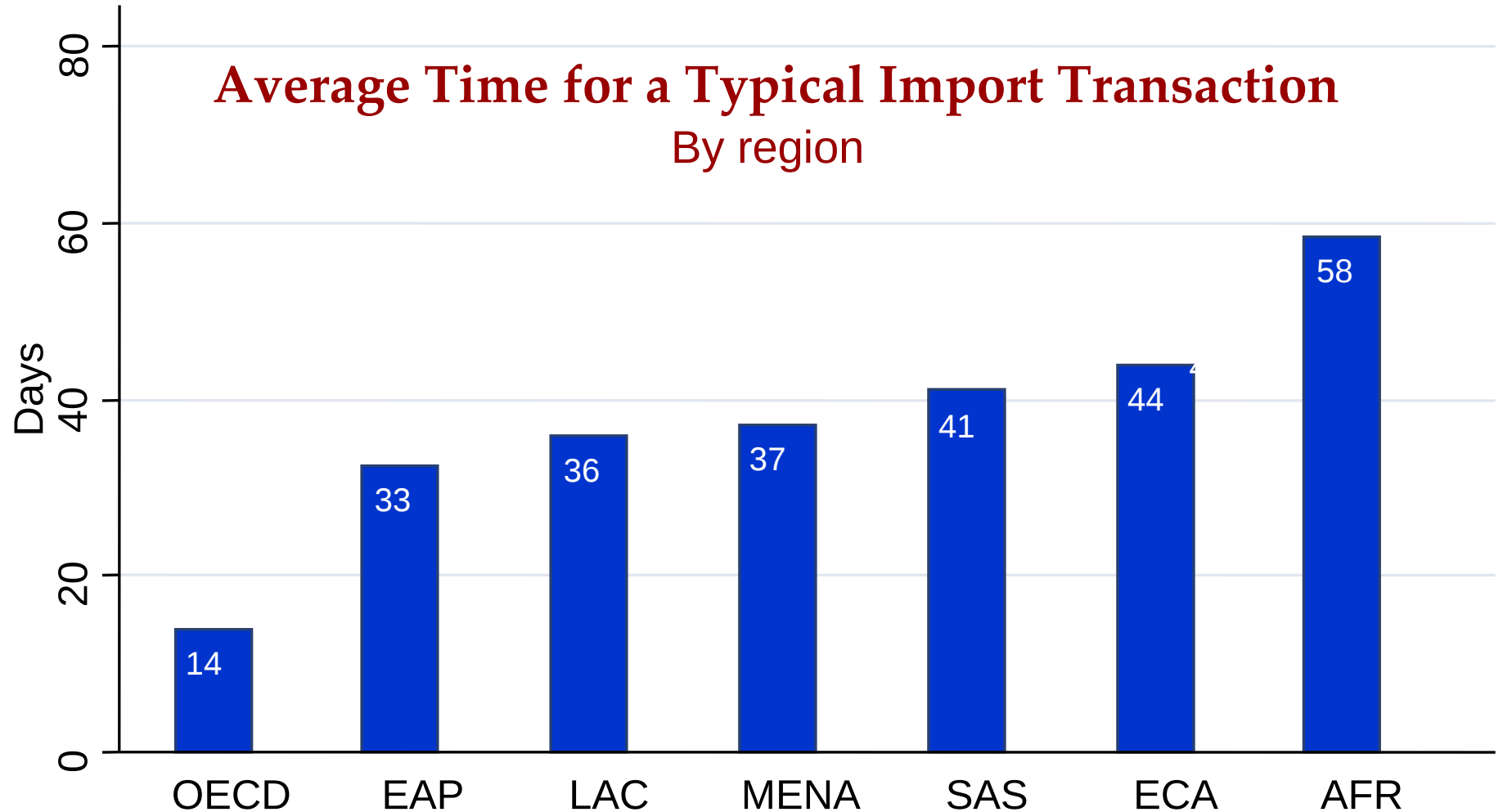
Satisfaction with results achieved through low-cost country sourcing program



Global Logistics

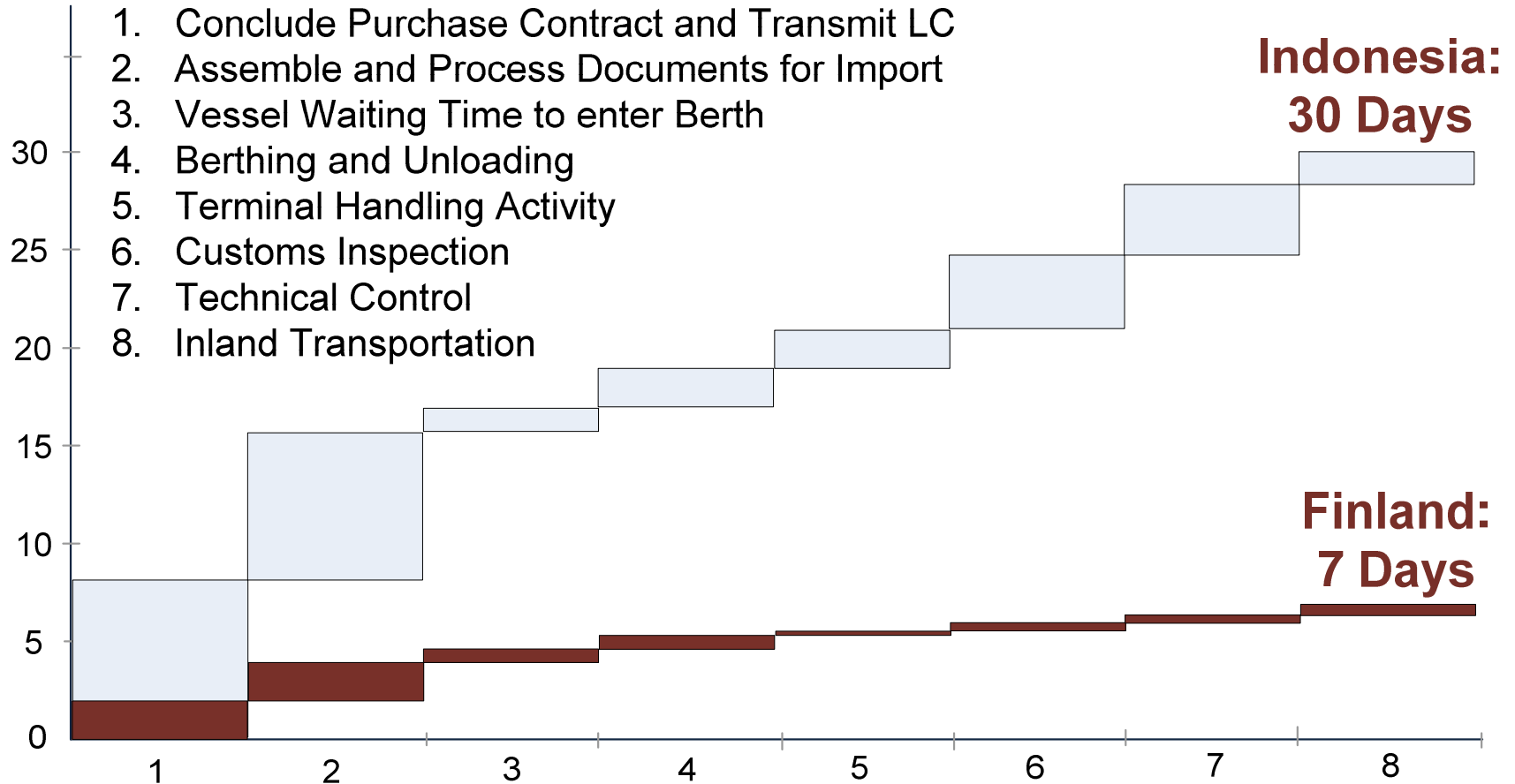


Global Logistics



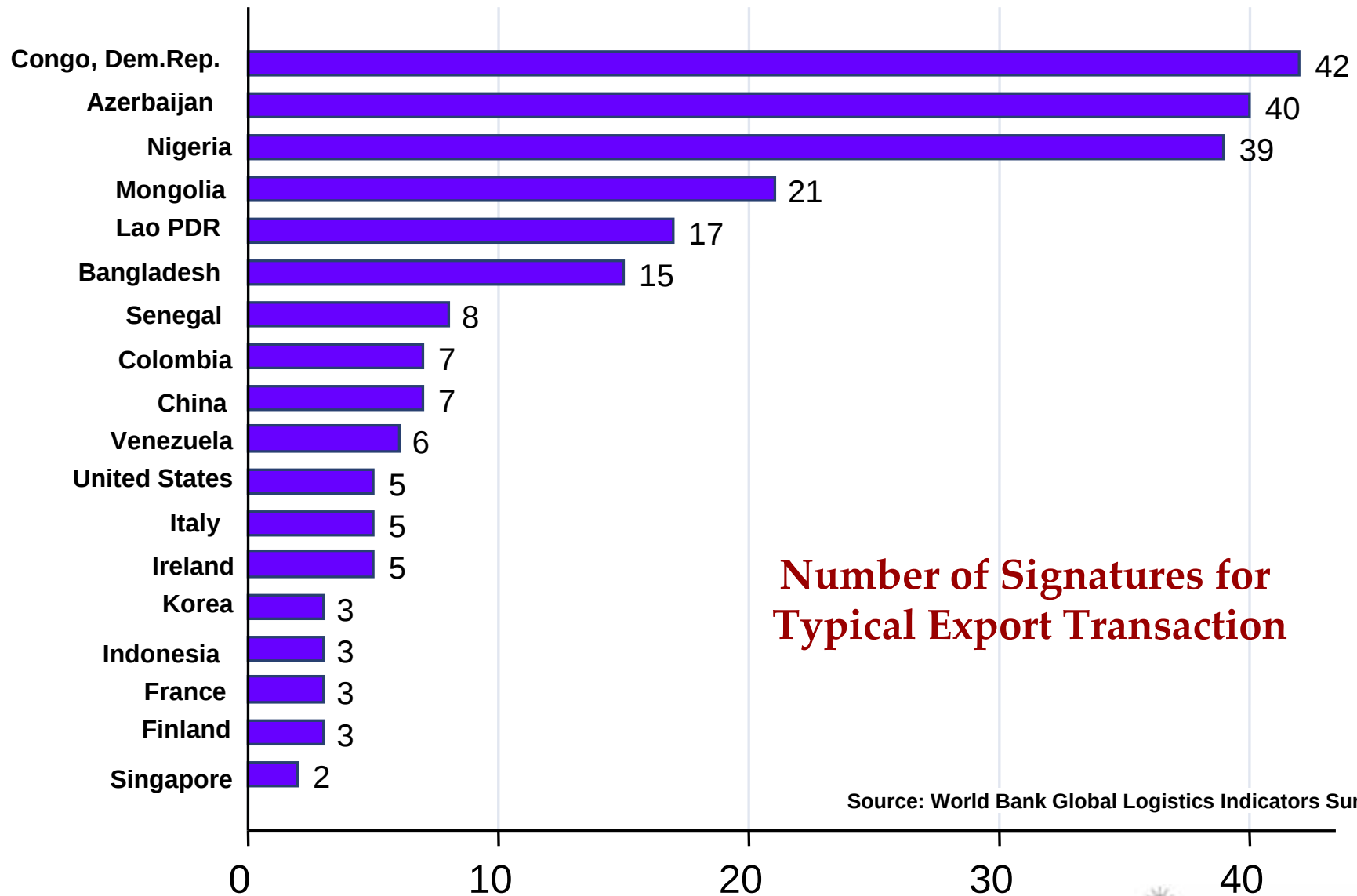
Source: World Bank Global Logistics Indicators Survey

Global Logistics



Source: World Bank Global Logistics Indicators Survey

Global Logistics



**Number of Signatures for
Typical Export Transaction**

Source: World Bank Global Logistics Indicators Survey

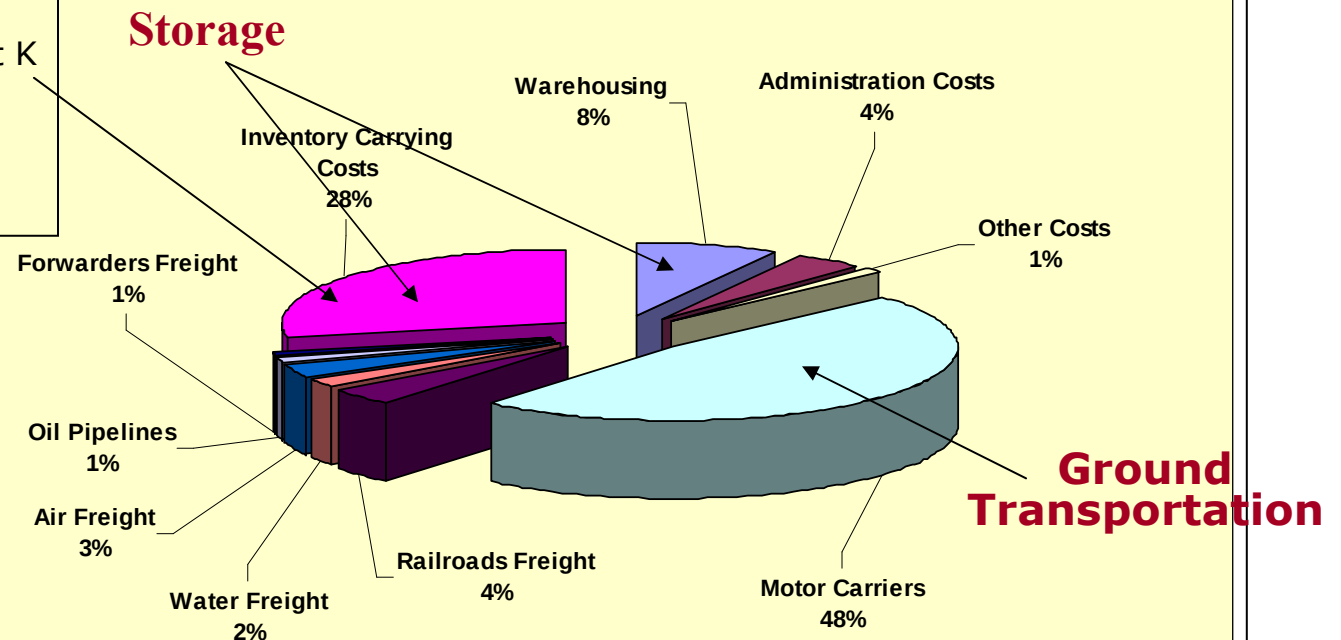
SCM Logistics Costs

Stock Keeping

- **18% - 35% per Year**
 - ✓ 82 % Interests + Cost K
 - ✓ 14 % Obsolescence
 - ✓ 3,3 % Holding
 - ✓ 0,5 % Taxes
 - ✓ 0,25% Insurance

Source: Herbert W. Davis; "Physical Distribution Costs: Performance In Selected Industries, 1988, CLM

Components of 1999 Logistics Costs Total US Logistics Costs (US\$ 921 Billion)



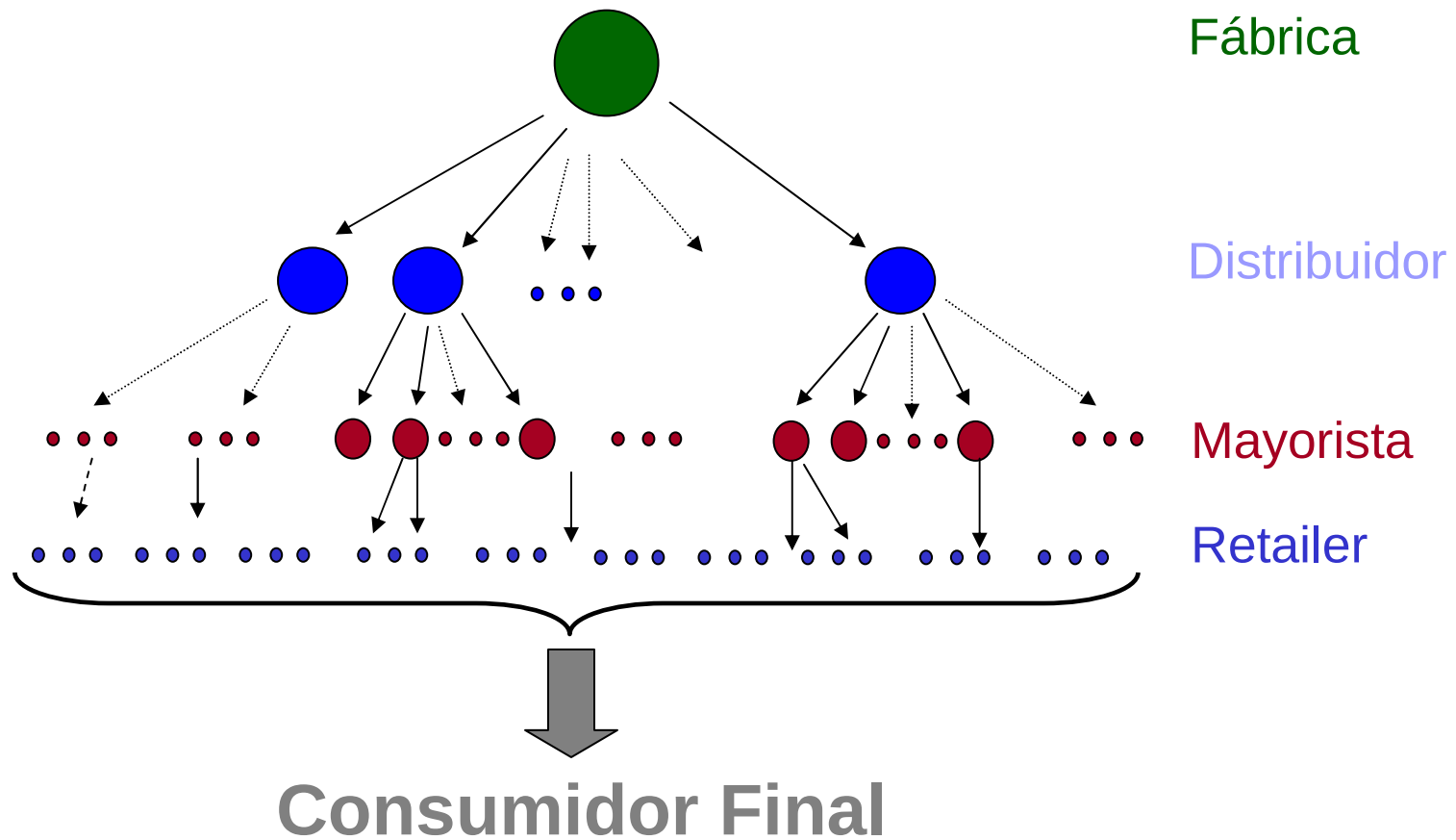
Source: Adapted from Rosalyn Wilson and Robert V. Delaney, 11th Annual State of Logistics Report, remarks made to the National Press Club, Washington, D.C. (June 5, 2000)

Transportation Cost + Inventory Costs = 84%

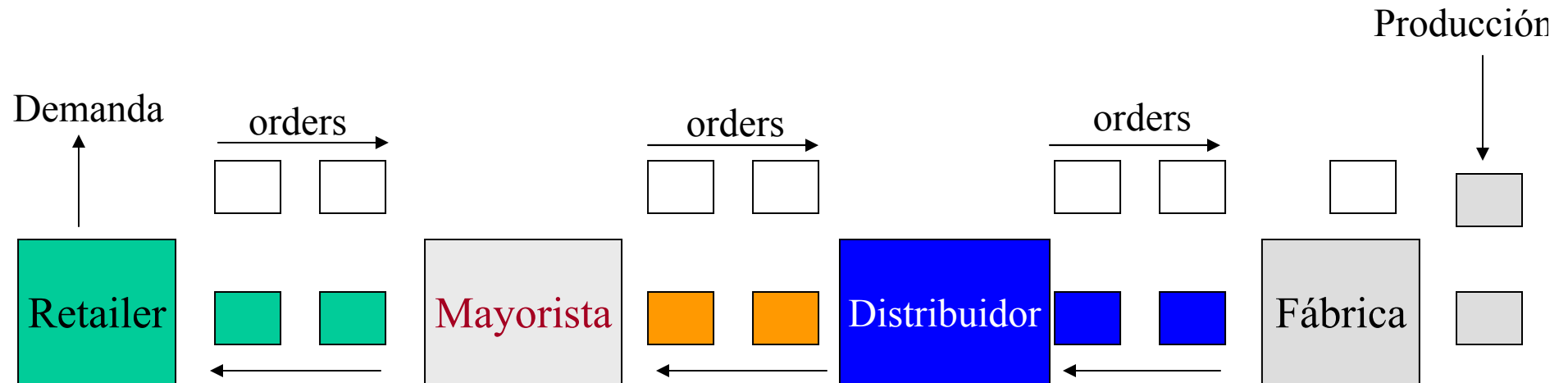
Cadena de Suministro Beer Game



Cadena de Suministro

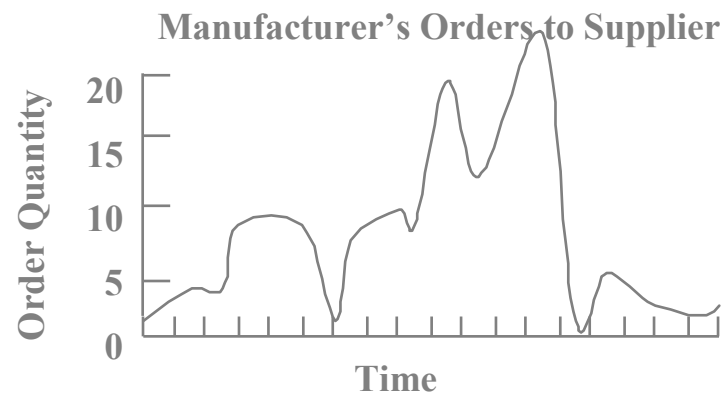
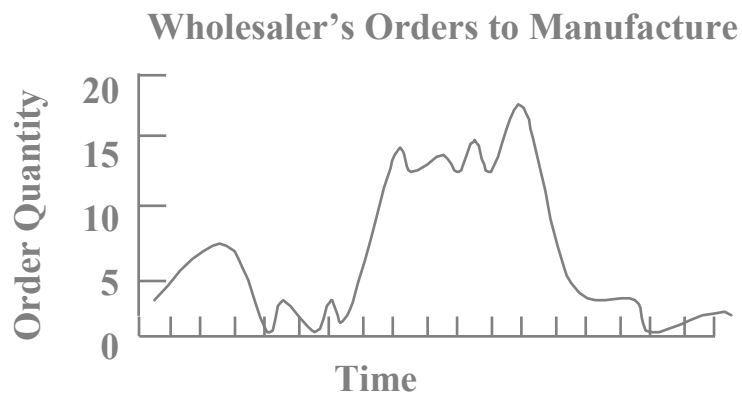
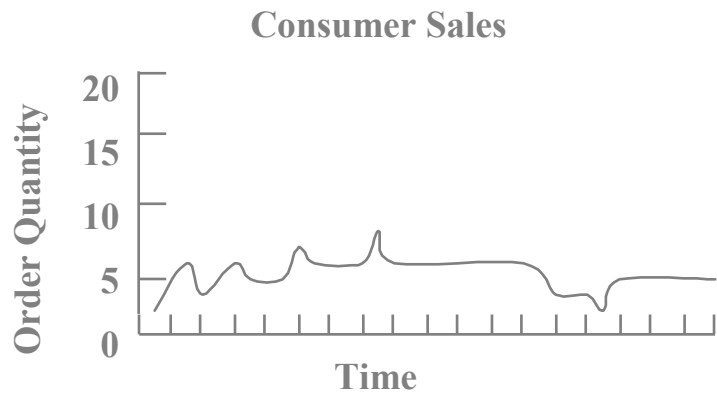


Beer Game



1. Se sintió de tanto en tanto “bajo el efecto” de fuerzas fuera de su control? (i.e., desprotegido frente a ordenes de demanda muy altas o teniendo mucho inventario)
2. Se encontró “culpando” a la persona sentada a su izquierda o derecha por sus problemas?

Variabilidad de las órdenes Aumenta “Aguas Arriba” en la Cadena



La información se distorsiona por distintos motivos al avanzar hacia atrás en la cadena de suministro. Esto genera muchísimos costos (desperdicios) de exceso de inventario, quiebres de stock, capacidad ociosa, mayor riesgo operacional.



Este fenómeno se conoce como
EL EFECTO LATIGO.

Ejemplos

- Procter & Gamble (P&G) y Pañales
 - ✓ Mercado razonablemente estable a nivel del consumidor final
 - ✓ Alta variabilidad en los órdenes de P&G a sus proveedores (como 3M)
 - ✓ P&G introdujo el termino “bullwhip effect”

- Hewlett Packard (HP) e Impresoras a Tinta
 - ✓ Algo de variabilidad en ventas
 - ✓ Mayor oscilación en ordenes a mayoristas
 - ✓ Aun mayor oscilación en ordenes a la división de producción

Algunas Soluciones al Efecto Látigo

➤ Pronósticos de Demanda & Visibilidad de Inventarios

- ✓ Sistemas de Información Integrados – EDI & B2B & RFID
- ✓ Reducir las Fluctuaciones de Precio - EDLP
- ✓ Nivelar Órdenes de Producción – Heijunka
- ✓ Reducir los Leadtimes de Producción y Transporte
- ✓ Vendor Managed Inventory – CRP
- ✓ Inventario Agregado – Echelon Inventory

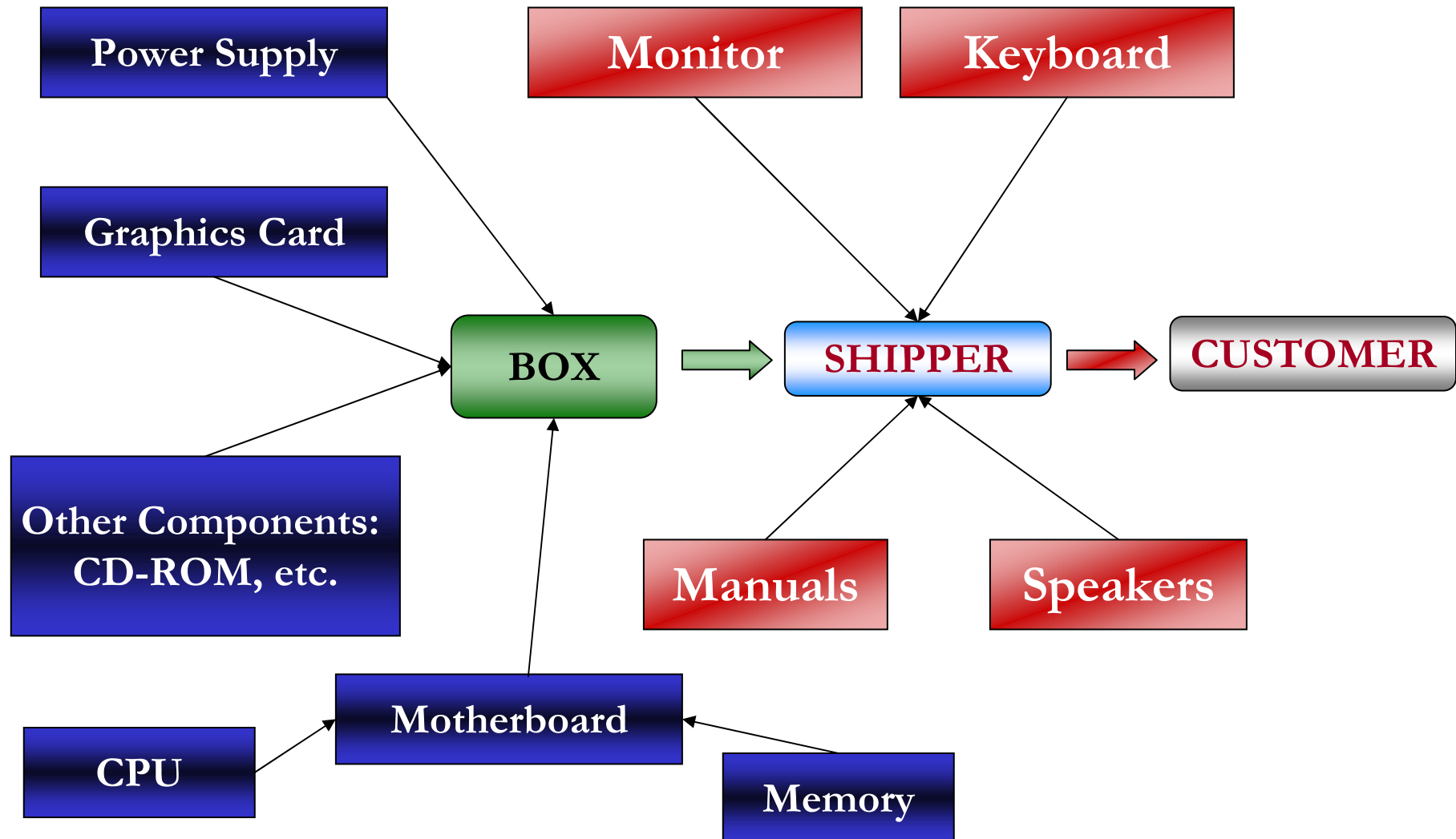
➤ Alinear los Incentivos de las Partes Involucradas

- ✓ Diseño de Contratos – Penalidades por Devolución
- ✓ Reducir el “Shortage Gaming”

➤ Acortar la Cadena de Suministro

- ✓ Diseño de la Cadena Apropriada (e.g., eficiente vs. ágil)
- ✓ Operadores Logísticos – Consolidación
- ✓ Postponement – (e.g., Benetton)

Diseño de la Cadena de Suministro



ZARA: Fast Fashion



- Crecimiento de 20%/año desde los '90s.
- Margen neto del 10%
- INP una vez por semana,
- 12K nuevos productos/año
- 23-30 días entre diseño final y venta.

How Fast is Zara's Fast Fashion



Dos Ejemplos de Fast-Fashion

	Zara (Spain)	H&M (Sweden)	The Gap (U.S.A.)
Vertical Integration (2007)	Fully integrated. Subcontracts cutting, sewing, and shipping	Controls every link in the chain but does not own factories	From design to store but outsources production
No. of stores worldwide (2007)	1,361	1,522	>1,572
No. of Countries (2007)	68	28	21
Distribution of Stores - Main Locations (2007)	13% North Europe 60% South Europe 7% East Europe 8% Latin America 5% Asia Pacific	63.5% North Europe 19% South Europe 5% East Europe 12% North America	9% United Kingdom 79% North America 7% Japan
Sourcing - Main Suppliers (2006)	34% Asia 50% Spain & Prox. 14% Rest of Europe	>60% Asia <40% Europe	97% outside U.S.A.
Assortment Composition (2006)	40% Basic 60% Fashion	>70% Basic <30% Fashion	99% Basic
Lead Times - Dual SC (2006)	Efficient SC: 6 Months Responsive SC: 2-5 Weeks	Efficient SC: 6 Months Responsive SC: 3-6 Weeks	Efficient SC: 9 Months
Refresh Fashion Items (2006)	Twice a week	Daily	Occasionally
Pricing (2002)	Overall, higher than H&M (especially out of Spain)	Lowest among Fast Fashion	Comparable to Zara, if not higher
Marketing Expenditure (2002)	0.3% of Revenues	3-4% of Revenues	Comparable to H&M

ress