

# Sustainability Around the World

J. N. Hooker

*Tepper School of Business  
Carnegie Mellon University*

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# Theme

- Four perspectives on sustainability:
  - Environmental (energy, circular economy)
  - Social (inclusion)
  - Financial (stability)
  - Corruption (systemic)





# Outline

- Basic concepts
- Ethical basis for sustainability
- Sustainable businesses
- Sustainable banking and Islamic finance
- Business cultures around the world
- Sustainable supply chains
- Sustainability vs. corruption



# Detailed Outline

- Basic concepts
  - Sustainability
  - Triple bottom line, triple top line
  - Greenwashing
- Ethical basis for sustainability
  - Generalization principle
  - Ethics and fiduciary duty



# Detailed Outline

- Sustainable businesses
  - Umicore in Africa (circular economy)
  - Lease vs buy
  - Car sharing
  - Conoco in Ecuador (indigenous rights)
  - AES Corporation in US, Kazakhstan (energy)
  - World's largest wind farm, solar farm
  - Tea growers in Kenya (inclusion)
  - Affordable housing in Mexico (inclusion)



# Detailed Outline

- Sustainable banking and Islamic finance
  - Sustainable banking vs. financial instability
  - Vancity in Canada
  - Triodos Bank in Netherlands
  - Islamic finance – Risk sharing
  - Islamic finance – Unnecessary risk
  - Financial crisis of 2008
  - Parallels: Western sustainable banking & Islamic finance



# Detailed Outline

- Business cultures around the world
  - Relationship-based and rule-based cultures
- Sustainable supply chains
  - Mattel in China
  - Apparel industry in south Asia
  - Li & Fung global supply chain



# Detailed Outline

- Sustainability vs. corruption
  - What is corruption?
  - Kodak in Taiwan (kickbacks)
  - The legal picture
  - Enron in India (bribery)
  - LKK in China (nepotism)
  - Celtel in Africa (bribery)



# Basic Concepts

# Basic Concepts

- Sustainable Business
- Triple Bottom Line
- Triple Top Line
- Greenwashing



# Sustainable Business

- What is it?
  - Business that meets the needs of the **present** without compromising the ability of **future** generations to meet their needs.
    - Brundtland definition (1987)



# Sustainable Business

- What is it?
  - Business that contributes value while supporting the **environmental**, **social**, and **economic** systems that make value creation possible over the long run.



# Sustainable Business

- What is it?
  - Business that manages for the **Triple Bottom Line**.



# Triple Bottom Line

- A “full cost” accounting approach
  - People
    - Social impact of the business.
  - Planet.
    - Environmental impact.
  - Profit.
    - Traditional measures.



# Triple Bottom Line

- How to measure it?
  - Global Reporting Initiative (1997)
    - Used by 7500 organizations for sustainability reporting



# Triple Bottom Line

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    - Used by 7500 organizations for sustainability reporting
  - People
    - Difficult to measure. Includes working conditions, living wage, health and safety, attention to special groups (children, women, migrant workers, minorities, indigenous people). ISO 18001.



# Triple Bottom Line



- How to measure it?
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    - Used by 7500 organizations for sustainability reporting
  - People
    - Difficult to measure. Includes working conditions, living wage, health and safety, attention to special groups (children, women, migrant workers, minorities, indigenous people). ISO 18001.
  - Planet.
    - Fairly well established measures. Carbon footprint, biodiversity, energy efficiency. ISO 14010, 14011, 14012, 26000.

# Triple Top Line

- Motivation
  - Based on the claim that triple-bottom-line thinking leads to focus on limiting the negative effects of industry.
    - Rather than on creating all-positive effects from the start that don't require mitigation or regulation.
    - McDonough & Braungart, 2002



people



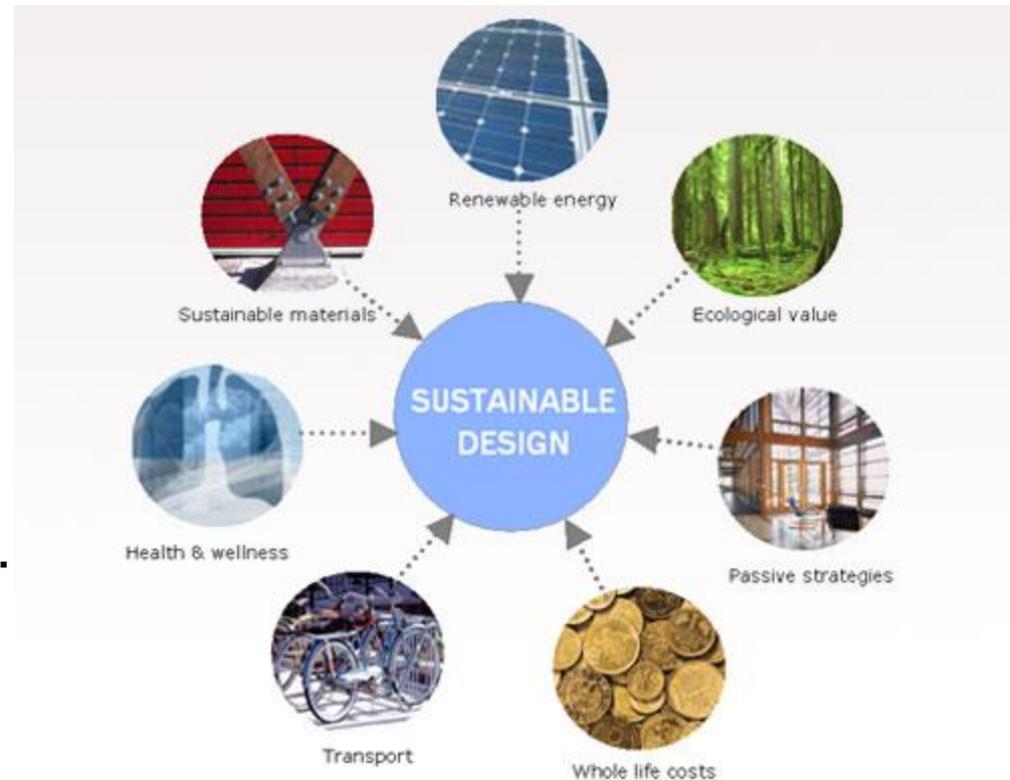
planet



profit

# Triple Top Line

- Practical meaning
  - Build sustainability into the design of the business and products
  - Results in “sustaining” rather than “sustainable” business.



# Greenwashing

- What is it?
  - Greenwashing = spending more time and energy claiming to be green than being green.



# Greenwashing

- Example: a company advertises its new green technology, but fails to mention that most of its operations use legacy technology.
- Example: a hotel claims to be green because it allows guests to reuse sheets and towels, but wastes water and energy on everything else.



# Greenwashing

- Why does it exist?
  - Measuring sustainability is complex.
    - It's hard for an outsider to assess company performance.
    - Companies take advantage of this.
    - Are sustainability awards based on real research?



# Greenwashing

- Why does it exist?
  - There are benefits to a positive image
    - Companies often see a positive image as the only way to justify sustainability investments.
    - Companies may want to cash in on sustainability investments they have not made.



# Ethical Basis for Sustainability

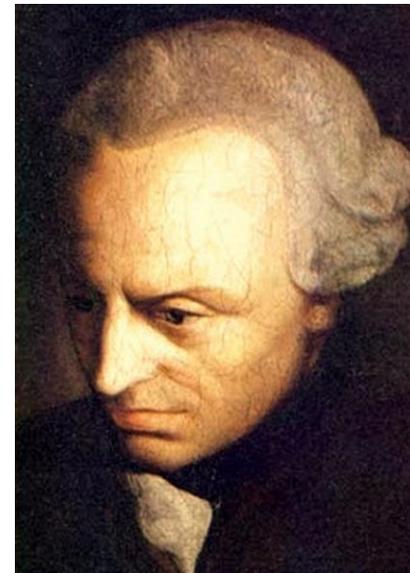
# Ethical Basis for Sustainability

- Generalization Principle
- Fiduciary Duty



# Generalization Principle

- A well-known principle of ethics:
  - Choose an action that could achieve its purposes if **everyone** with the same purposes were to act the same way.



Immanuel Kant  
1724-1804

# Generalization Principle

- Examples:
  - Telling a lie
    - I want tell a lie merely for personal convenience.
    - Suppose **everyone** told lies whenever it is convenient.
    - Then nobody would believe my lie!
    - It wouldn't achieve its purpose.
    - *Communication presupposes truthfulness.*



# Generalization Principle

- Examples:
  - Breaking a promise
    - I want to break a promise to repay a loan, to save money.
    - Suppose **everyone** broke promises when they could save money.
    - Then nobody would lend money!
    - I wouldn't have the money in the first place.
    - *Making promises presupposes that people generally keep them.*



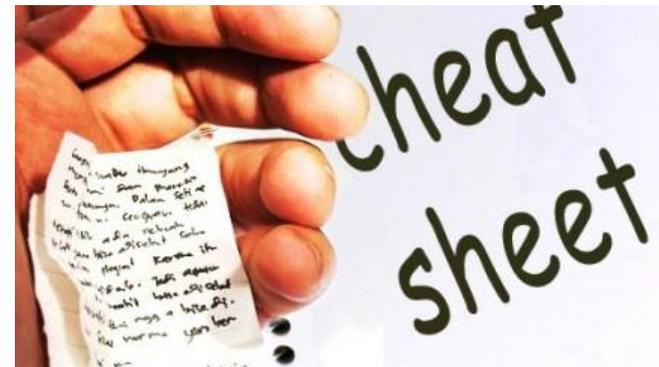
# Generalization Principle

- Examples:
  - Theft
    - I want steal a watch in a shop because I would like a new watch, and I can get away with it.
    - Suppose **everyone** did so.
    - Then the shop would install security, lock the watches in a display case, etc.
    - I would not be able to get away with it!
    - *Having property presupposes that people respect property.*



# Generalization Principle

- Examples:
  - Cheating on an exam
    - I want to cheat on an exam to get better grades, and therefore a good job.
    - Suppose **everyone** did so.
    - Then everyone would have an A+, and employers would ignore grades.
    - Cheating would not get me a good job!
    - *A meaningful grading system presupposes that people don't cheat.*



# Generalization Principle

- Sustainability is **another way of understanding the generalization principle**
  - Lying is not sustainable.
    - Undermines communication, which makes lying possible.
  - Promise breaking is not sustainable.
    - Undermines the practice of making promises.
  - Theft is not sustainable.
    - Undermines the institution of property.
  - Cheating is not sustainable.
    - Undermines the system that makes cheating worthwhile.

# Generalization Principle

- Sustainability is **another way of understanding the generalization principle**
  - Unsustainable business is not sustainable
    - Undermines the environmental and social systems that make profitable business possible.



# Fiduciary Duty

- Popular view:
  - Business ethics is **nothing more** than **fiduciary duty** to stockholders. Just maximize profit.
  - Fiduciary duty = obligation based on **agency agreement** between owners and executives.



# Fiduciary Duty

- This can't be right
  - Suppose you run your own business.
  - Does this means there is no business ethics?



# Fiduciary Duty

- The prior question for business ethics:
  - What are the ethical duties of the **owners**?



# Fiduciary Duty

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  - What are the ethical duties of the **owners**?
- If a decision is **ethical** for the owners...
  - It is normally ethical for fiduciaries to carry it out.



# Fiduciary Duty

- The prior question for business ethics:
  - What are the ethical duties of the **owners**?
- If a decision is **ethical** for the owners...
  - It is normally ethical for fiduciaries to carry it out.
- If a decision is **unethical** for the owners...
  - Fiduciaries are not obligated to carry it out on their behalf.



# Sustainable Business

# Sustainable Business

- Umicore in Congo (*circular economy*)
- Lease vs buy
- Car sharing
- Conoco in Ecuador (*indigenous rights*)
- AES Corporation in US, Kazakhstan (*energy*)
- World's largest wind farm, solar farm
- Tea growers in Kenya (*inclusion*)
- Affordable housing in Mexico (*inclusion*)



# Umicore in Congo

- A dark past in the mining industry ...
  - Historically involved in Belgian Congo.
    - Perhaps the most exploitative European colony ever.
  - Today, a €10 billion company known for recycling and sustainability.
    - In 2013, ranked most sustainable company in the world by Corporate Knights.



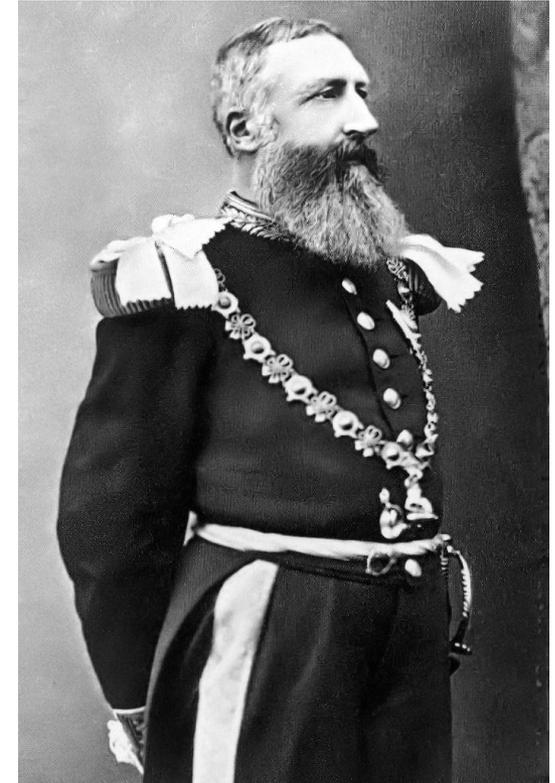
# Umicore in Congo

- Yet the company is asking how it can “monetize” its sustainability practices.
  - That is, convert them to profits.
  - Offers an important lesson in how we think about sustainability.



# Umicore in Congo

- Looking back...
  - 1885: Belgium's King Leopold II seized personal control of Haut Katanga in central Africa.
    - Later known as Belgian Congo.
    - He wanted to exploit mineral resources.
  - 1906: Union Minière du Haut Katanga (UMHK)
    - Formed to mine copper, tin cobalt, etc.



# Umicore in Congo

- Looking back...
  - World War I and II: UMHK expands
    - Supplies minerals to British and Americans.
  - 1960: Congo becomes independent Zaire\*
    - Company operations disrupted.
    - Nationalized by Mobutu in 1968.
    - Focuses on operations elsewhere.
    - Absorbed by Société Générale de Belgique.



\*Now Democratic Republic of the Congo 44

# Umicore in Congo

- Looking back...
  - 2001: Name change to Umicore
    - Company growth has stalled
    - Wants to shed association with Congo
    - Becomes independent public company in 2004.
    - Moves into recycling.
    - Invests €174 million to clean up legacy sites.



# Umicore in Congo

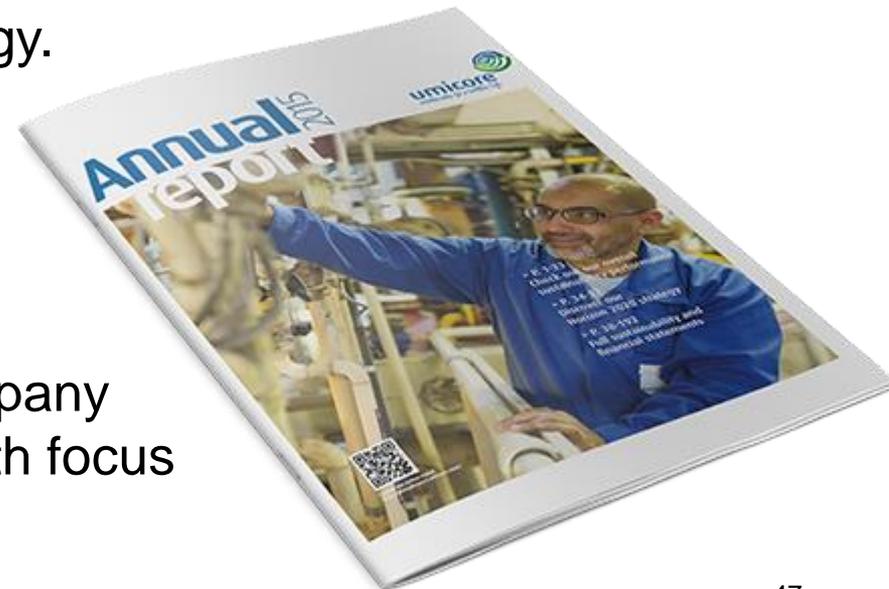
- Looking back...
  - 2007: Signs on to sustainability agreements.
    - Global Framework Agreement with major unions.
    - Pledge to observe UN Declaration of Human Rights.
    - Agrees to observe ILO's core labor standards.



INTERNATIONAL LABOR ORGANIZATION

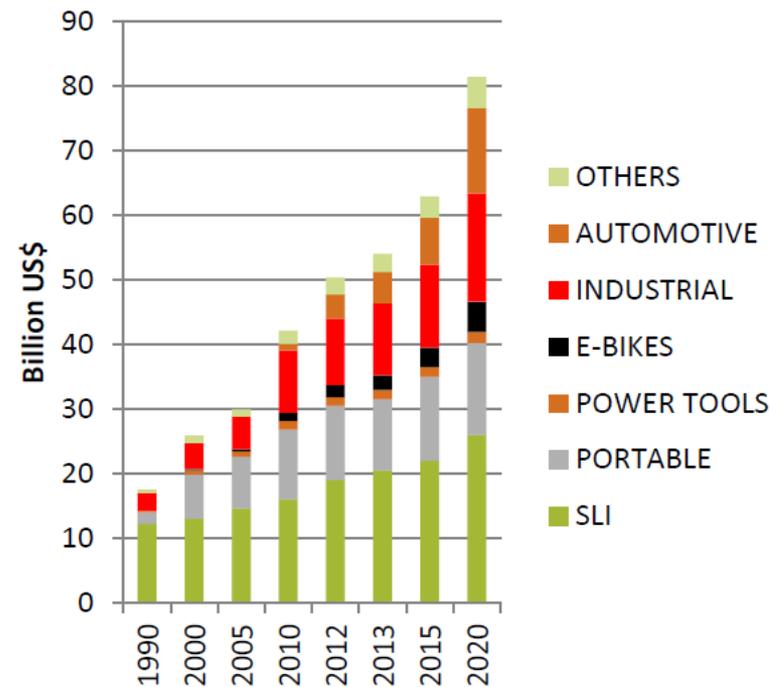
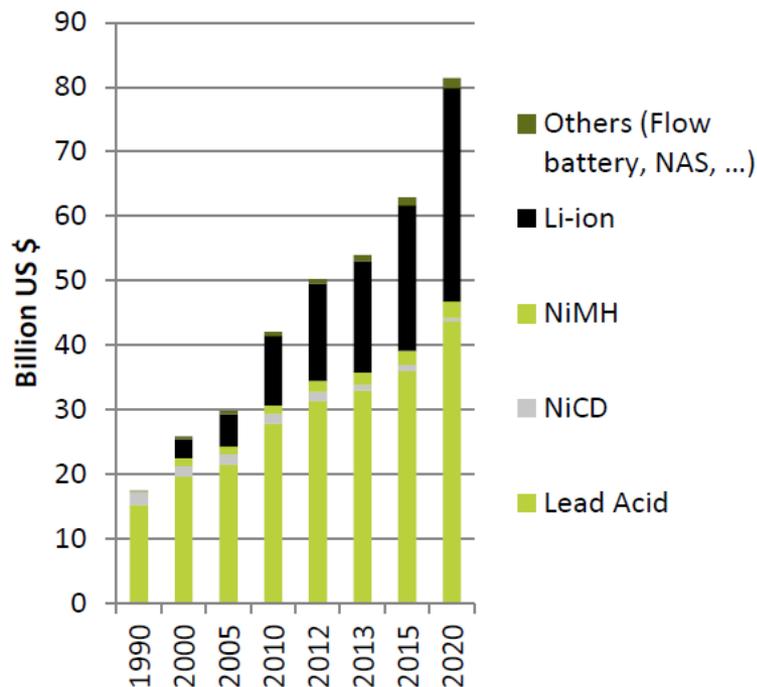
# Umicore in Congo

- Looking back...
  - 2007: New directions
    - Sell off mining divisions that do not meet sustainability standards
    - Develop recycling technology.
    - Move into new products, like automotive catalysts and batteries.
    - Restyle annual report to reassure shareholders company has a long-term strategy with focus on sustainability.



# Umicore Worldwide

- Example: Battery recycling
  - Responding to rapid growth in demand for rechargeable batteries.



# Umicore Worldwide

- Example: Battery recycling
  - 2011: New recycling plant in Hoboken, Belgium.
  - Major customer: Toyota



# Umicore Worldwide

- Recognition
  - 2013: Number one by Corporate Knights.
  - Still, there were skeptics



# Umicore Worldwide

- Today (2015)...
  - Operates in 34 countries. 10,000 employees.
  - Annual revenues €10 billion
    - Up 11% from 2014
  - R&D expenditure €144 million
  - ROI comparable to industry average



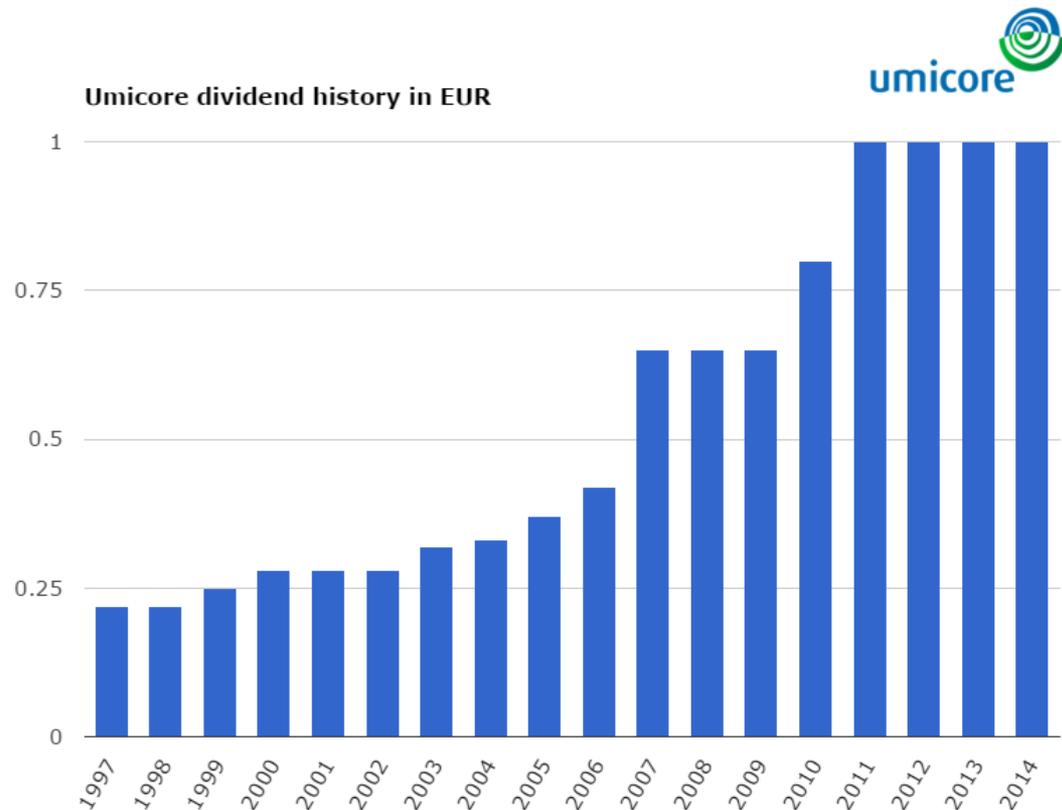
# Umicore Worldwide

- Still, Umicore executives want to monetize investment in sustainability
  - Convince customers to pay premium price.
  - Increase market share based on positive media exposure.



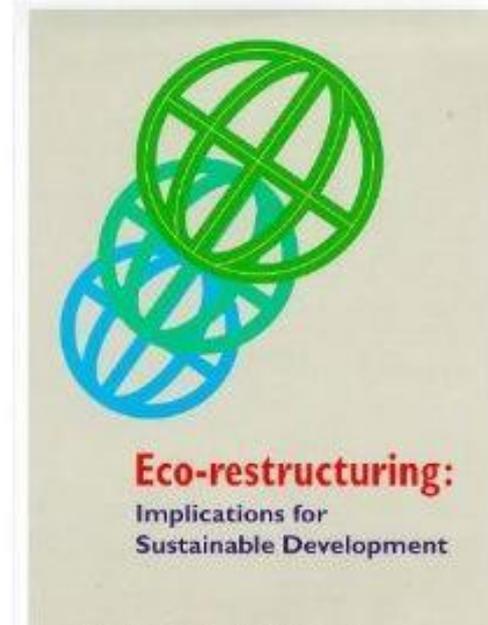
# Umicore Worldwide

- But Umicore has already benefited!
  - Focus on restructuring for sustainability rescued a declining business.
    - Modernized the business, aligned it with today’s growing “circular economy.”



# Umicore Worldwide

- Lesson:
  - A firm can benefit from restructuring for sustainability
    - ...simply because the fundamentals of the process receive **more attention**
  - Particularly a firm in legacy industries.



# Lease vs Buy

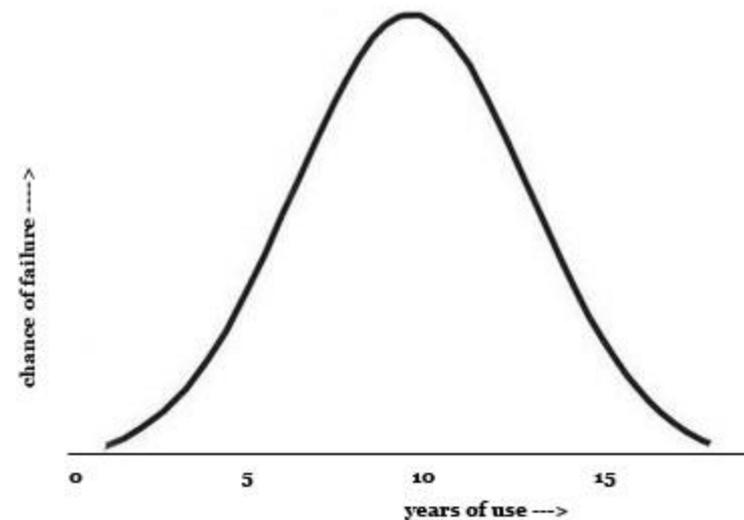
- An alternative to recycling in the circular economy.
- Case study: Washing machines
  - Wide range of models
    - Low end: 2000 cycles
    - High end: 10,000 cycles

Source: Ellen MacArthur Foundation,  
*Towards the Circular Economy, 2013*



# Lease vs Buy

- Households have incentive to purchase low-end machines
  - About 250 cycles per year
  - Warranty period 1-2 years
  - Typical lifetime less than 10 years
  - Lifetime usage about 2000 cycles

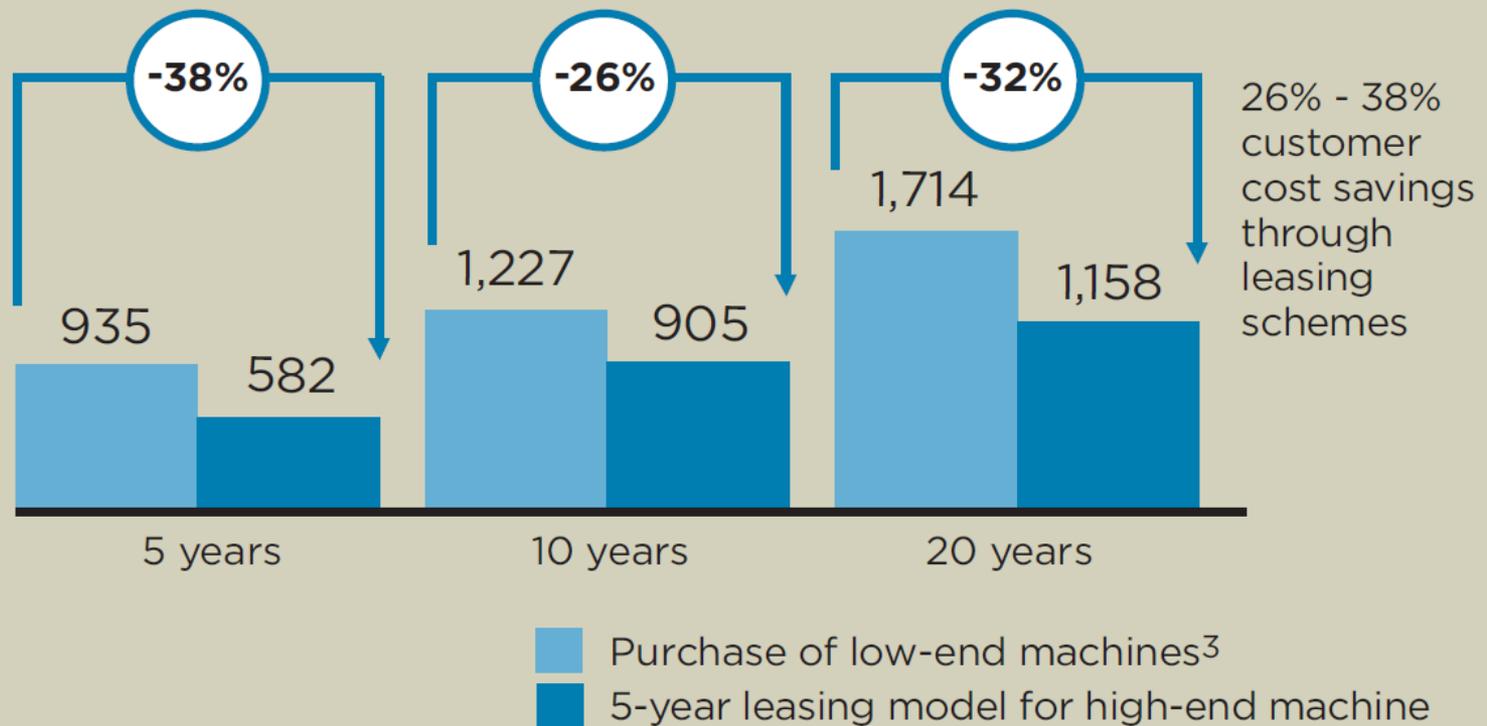


# Lease vs Buy

- Why lease?
  - Cost advantage for consumer
    - High-end machines: US\$ 0.12 per cycle
    - Low-end machines: US\$ 0.27 per cycle
    - **Lease** a high-end machine
    - Avoid up-front capital cost
    - Save on net present cost

# Lease vs Buy

Customer's net present costs<sup>1</sup> of washing machine usage over time<sup>2</sup>  
 USD per customer



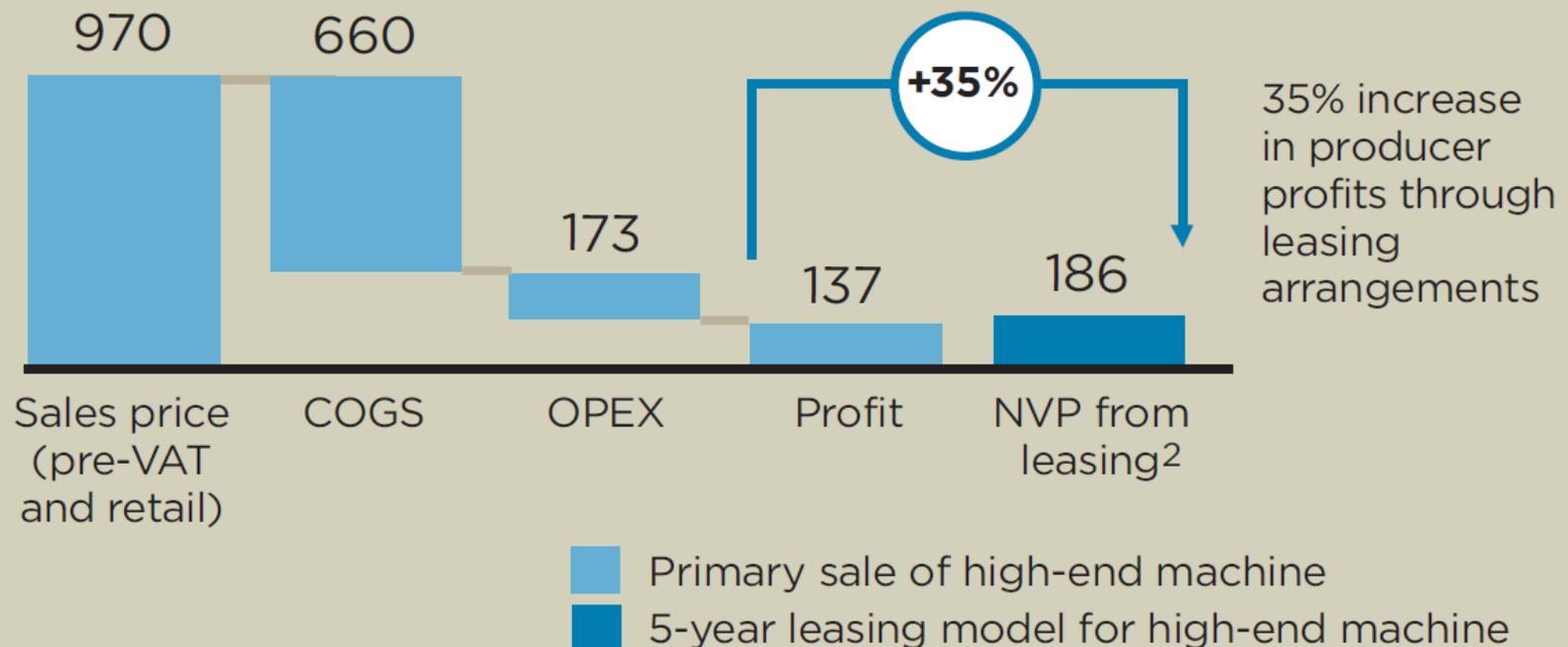
# Lease vs Buy

- Why lease?
  - Cost advantage for manufacturer
    - Lease a high-end machine 4 times over 20-year life
    - Continuous revenue flow
    - Recover value embedded in the used machines
    - Cost of collection, transport, refurbishing:  
\$US 170 per machine

# Lease vs Buy

## High-end machine manufacturer's profits from primary sale and leasing

USD per machine



# Lease vs Buy

- Sustainability advantages
  - 180 kg steel saved per machine
  - 2.5 tonnes CO<sub>2</sub> savings per machine
    - Due to greater efficiency of high-end machine.
    - New models have technology updates, but...
    - ...many of these can be retrofitted into leased machines between 5-year leases.



# Car Sharing

- A new business model for car manufacturers
  - The first major change in business model since the beginning of the automotive age



# Car Sharing

- A new business model for car manufacturers
  - Potential for greater sustainability
    - Cars are inherently inefficient.
    - They take over our world.
    - Probably the worst possible way to commute to work.
    - But cars are here to stay.
    - Car sharing may be best feasible solution.



# Car Sharing

- Types of car sharing
  - Peer to peer.
    - Car owners rent their car to others.



# Car Sharing

- Types of car sharing
  - Business to customer.
    - Car sharing by rental companies.



# Car Sharing

- Types of car sharing
  - Business to customer.
    - Car sharing companies.



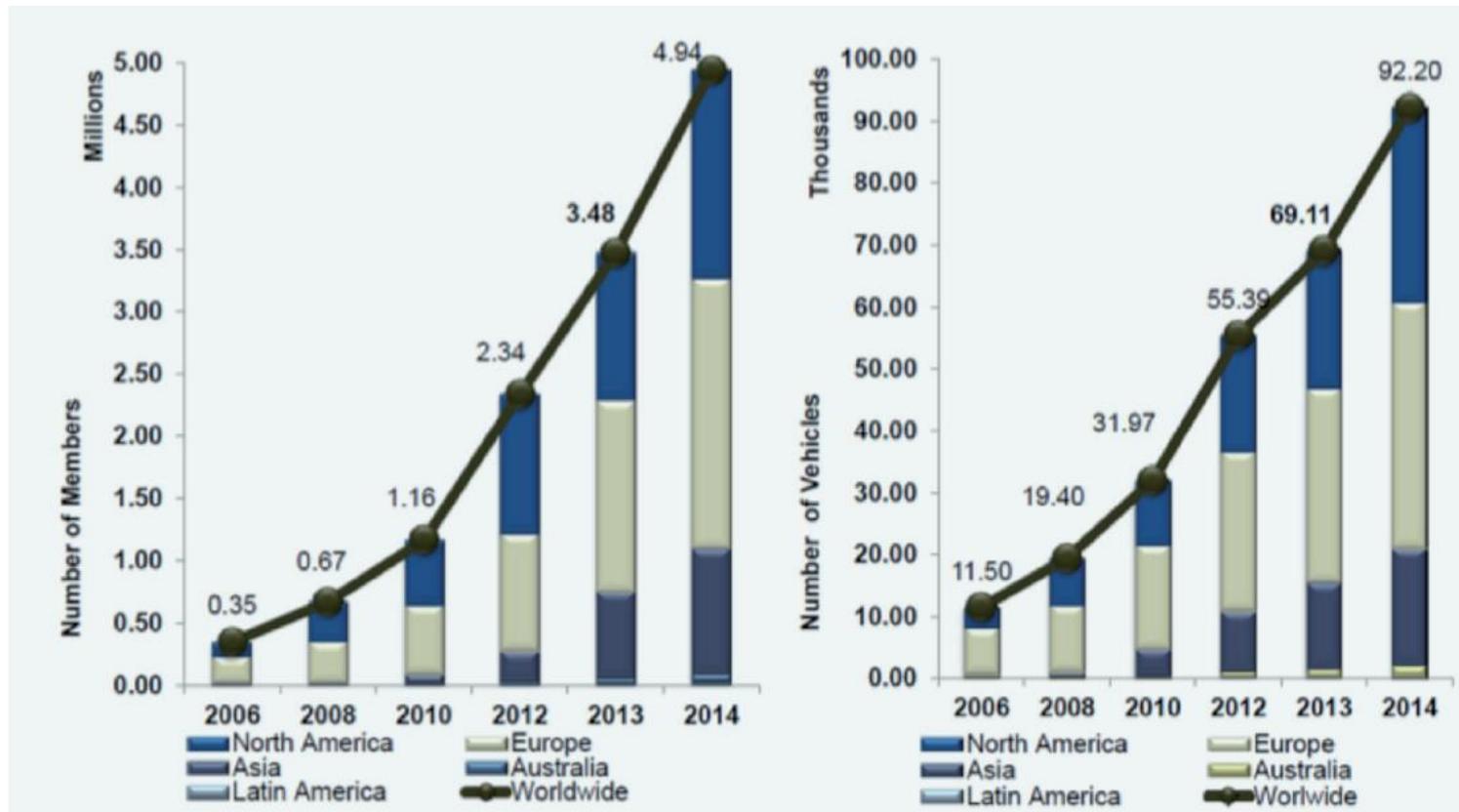
# Car Sharing

- Types of car sharing
  - Business to customer.
    - Auto manufacturers



# Car Sharing

- Growth of car sharing



# Car Sharing

- Characteristics of car sharing
  - No chauffeur
  - Users pre-register
  - Billed by the minute or hour, sometimes by km
    - Possible membership fee
  - Reserved or spontaneous
  - Pick up at many distributed locations
    - Often accessible by public transport
  - Renter services the car
    - Fuel, occasional cleaning, maintenance



# Car Sharing

- Manufacturers interest in car sharing
  - The world is clogged with cars
  - **Sales** growth must decline
  - Urban dwellers losing interest in car ownership
    - Expensive, Inconvenient, parking problem
    - Millennials have a new mindset



# Car Sharing

- Manufacturers currently into car sharing
  - Daimler was first
    - Austin, Texas, USA
    - Now largest in world, 1 million members
  - BMW is largest in Germany
    - 500,000 members
  - Peugeot, Volkswagen, and Ford operate in Europe
  - GM just starting in USA



# Car Sharing

- Car sharing business model
  - Offer efficient, low-end models for car sharing
    - Often, electric cars
    - Manufacturer pays operating costs
    - Can invest more in efficiency, because a car generates more revenue



# Car Sharing

- Car sharing business model
  - Maintain sales at the high end
    - To customers who prefer performance to efficiency
    - Allows luxury car makers to maintain current sales while expanding into low-end market
    - This is why luxury brands entered car sharing first



# Car Sharing

- The consumer's perspective
  - Can avoid buying a 2<sup>nd</sup> or 3<sup>rd</sup> car
    - Let the teenagers drive a shared car
  - Can avoid buying a car at all
    - Use public transport or bicycle except when it is necessary to haul a load



# Car Sharing

- The consumer's perspective
  - Save on high fixed costs for a car that is idle most of the day
    - Purchase price, insurance, leased parking
  - Forget about repair and maintenance

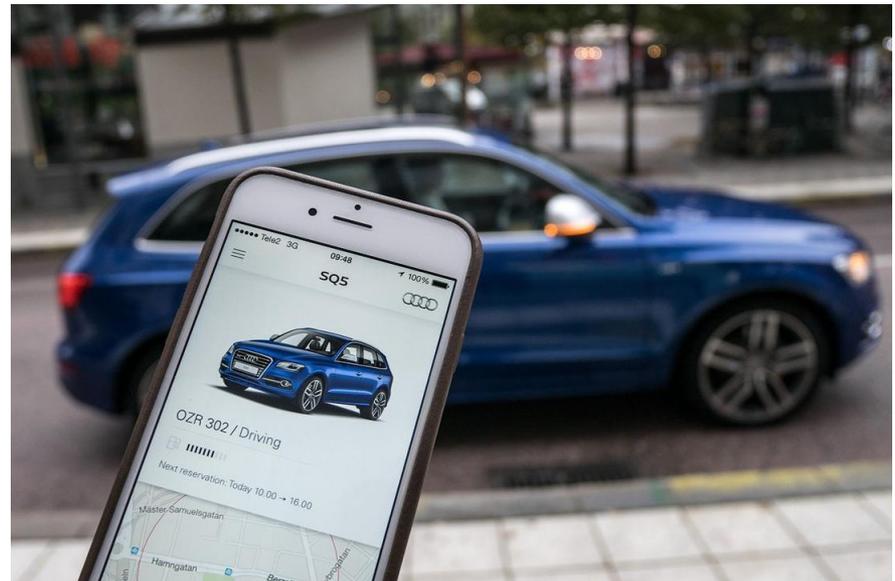


# Car Sharing

- Effect on sustainability
  - The plus side
    - More km traveled in efficient cars
    - Even low-end cars become more efficient
    - Fewer resources consumed in car manufacture
    - Less space tied up in parking
    - Less congestion due to fewer parked cars
    - Less congestion leads to less fuel waste
    - Less rush hour traffic, due to limited number of cars
    - Less traffic overall, because transport cost is variable rather than fixed.

# Car Sharing

- Effect on sustainability
  - The minus side
    - Some people may switch from public transport to driving
    - Not practical for commuting, due to limited fleet



# Conoco in Ecuador

- Sustainable oil prospecting
- Indigenous rights



# Conoco in Ecuador

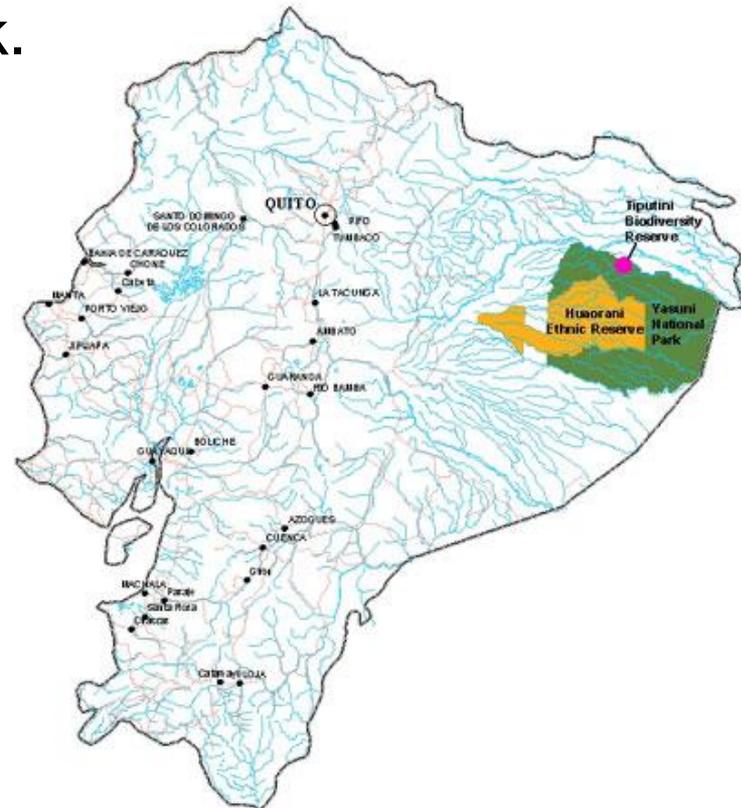
- Late 1980s: Conoco (now ConocoPhillips) began drilling in the Ecuadorian rain forest.
  - 35% of a consortium.
  - Petroecuador would receive 80% of profits, after recovery of investment costs.



PHOTO: CONOCOPHILLIPS COMPANY

# Conoco in Ecuador

- Conoco focused on Block 16
  - In Yasuni National Park.



# Conoco in Ecuador



San Rafael Falls,  
Yasuni National Park

# Conoco in Ecuador

- Environmental problems
  - Past drilling:
    - 17 million gallons of oil spilled.
    - 4 millions of hazardous waste dumped in rivers every day.
    - Toxic drilling mud buried.



# Conoco in Ecuador

- Environmental problems
  - Land occupation
    - Access roads allowed landless peasants to settle in the national park.
    - Companies cleared large areas of the forest.
    - Biodiversity threatened.



# Conoco in Ecuador

- Cultural issues
  - Home of Huaorani people
    - Little affected by outside contact.
    - Critics spoke of “ethnocide.”



# Conoco in Ecuador

- Conoco's plan
  - Minimize environmental damage.
    - Increase investment 5-10%.
    - Could avoid greater cost if controls later imposed.



# Conoco in Ecuador

- Conoco's plan
  - Hazardous wastes
    - Collection and treatment
    - Reuse and safe deposit of drilling mud.



# Conoco in Ecuador

- Conoco's plan
  - Access
    - Guards posted.
    - Access by ferries rather than bridges.
    - Employees not permitted to trade with Huaorani or fish on their land.
  - Presented plan to environmental and other interest groups in 1990.

# Conoco in Ecuador

- Subsequent events
  - Sold Block 16 operations to Maxus Corporation.
    - Due to opposition from indigenous and environmental groups.
    - YPF (Argentina) bought out Maxus.



# Conoco in Ecuador

- Subsequent events.
  - ConocoPhillips back in Ecuador, 2006.
  - Bought Burlington Resources.
  - Drilling rights in 2 blocks.



# Conoco in Ecuador

- Subsequent events
  - Drilling on hold.
  - Due to local and international opposition.



# Conoco in Ecuador

- Issue 1: Environmental protection
  - Even if government has responsibility, private business may also have responsibility.
    - Particularly if the government doesn't act.
  - Conoco relies on a successful global economy to operate profitably.
    - A successful global economy requires a livable environment.
    - Industry pollution violates generalization principle.



# Conoco in Ecuador

- Issue 2: Ethnocide?
  - 19<sup>th</sup> century Western view:
  - Indigenous people should be absorbed in mainstream culture

School for  
Aboriginal  
children,  
Australia



# Conoco in Ecuador

- Issue 2: Ethnocide?
  - Today's view
    - Indigenous cultures have intrinsic value.
    - Strong indigenous rights movement, particularly in Ecuador.
    - *U.N. Declaration on the Rights of Indigenous Peoples* (adopted 2007).

# Conoco in Ecuador

- Issue 2: Ethnocide?
  - Today's view
    - Indigenous cultures have intrinsic value.
    - Strong indigenous rights movement, particularly in Ecuador.
    - *U.N. Declaration on the Rights of Indigenous Peoples* (adopted 2007).
  - Cultural diversity
    - Cultural diversity is as valuable as biological diversity.



# AES Corporation in US

- Environmentally responsible energy production
  - Attempted to make **coal** a sustainable fuel.
  - Why? We are stuck with coal for now.



# AES Corporation in US

- Founded by Roger Sant and Dennis Bakke in 1981.
  - Lifelong interest in energy conservation and environmental issues.
    - Director of Energy Productivity Center at Carnegie Mellon University 1977-1981.



Roger Sant

# AES Corporation in US

- Business plan:
  - Independent power producer
  - Low cost: **coal-fired**
  - Environmentally friendly using latest technology
  - Long-term contracts with utilities that reflect actual plant costs.
  - Retain operational control of plants.



# AES Corporation in US

- Early emphasis on cogeneration.
  - Beaver Valley cogeneration plant (1987) was AES's second facility.
    - Down the Ohio River from Pittsburgh in Monaca.
    - Re-engineered old plant.
    - Sells steam to ACC and electricity to West Penn Power.



# AES Corporation in US

- Thames plant, Connecticut (1987)
  - **Coal-fired**, for competitive pricing.
  - Circulating fluidized bed boiler.
    - Cleaner than all current standards.
    - Captures 90% of sulfur, limiting acid rain. Minimizes nitrogen oxides.
  - Problem: how to limit CO<sub>2</sub> emissions?



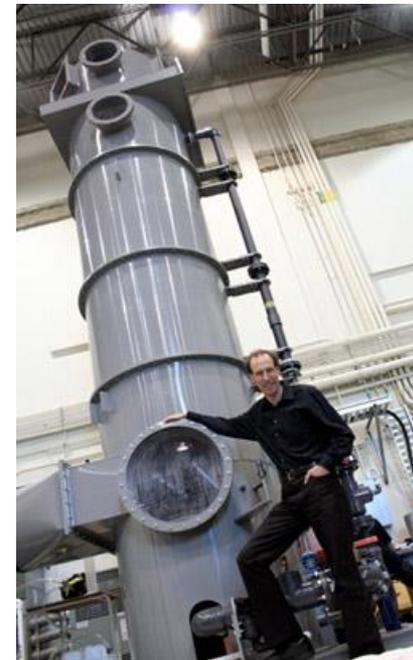
# AES Corporation in US

- Sant asked his staff for proposals on how to limit CO<sub>2</sub>.
  - Cost must not exceed 1% of \$275 million project cost.
  - Permanent disposal of CO<sub>2</sub>.



# AES Corporation in US

- Proposal 1: Scrub CO<sub>2</sub> from exhaust gases and sell it.
  - Scrubbers incur about 1% of capital cost, but:
    - Lower plant efficiency
    - Limited demand for CO<sub>2</sub>
      - e.g. enhanced oil recovery
    - CO<sub>2</sub> may eventually return to atmosphere.



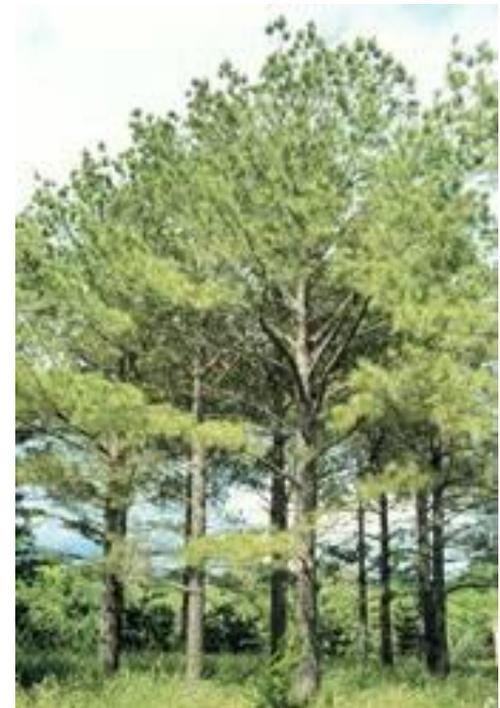
# AES Corporation in US

- Proposal 2: Abandon coal.
  - *Natural gas*: 2/3 the CO<sub>2</sub> of coal.
    - Fuel costs higher and unpredictable.
    - Operating costs 15% higher; would lose contracts.
  - *Garbage incineration*: pollution hazard unknown.
  - *Wind*: uneconomic without tax incentives.
  - *Hydro*: already exploited.



# AES Corporation in US

- Proposal 3: Reforestation. *Selected.*
  - Carbon trapped in organic material.
  - Need 2 sq. miles per megawatt.
  - Guatemala project undertaken.
    - 385 sq. miles slash-and-burn land reforested.
    - \$2 million AES contribution leveraged by:
      - \$1.8 million from USAID.
      - \$1.2 million from Guatemala.
      - \$2.0 million from CARE.
      - Labor from Peace Corps.



# AES Corporation in US

- PR fallout was mixed
  - Some ridiculed project as conscience money.
  - Investors and utilities expressed nervousness.
  - Locals wanted reforestation at home.
  - Is this really sustainable?
  - In one way it turned out well...
    - Positive international reaction helped AES expand globally in following years.



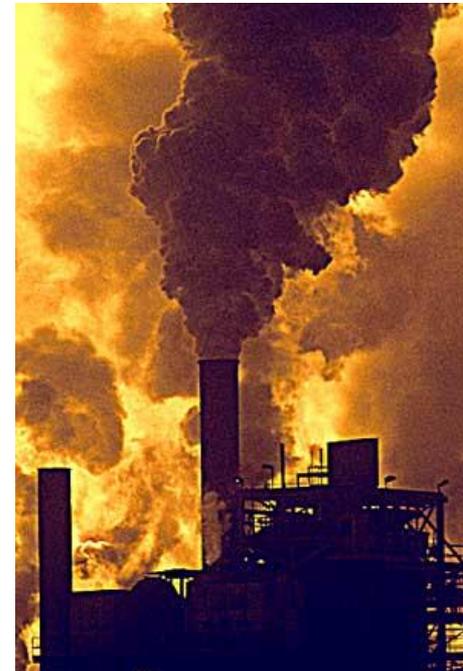
# AES Corporation in US

- Good PR was not Sant's motivation.
  - Two objectives:
    - Build a successful company.
    - Produce power in an environmentally responsible way.
  - Perhaps planting trees is not the right strategy for a power company.
    - Outside its expertise.
    - Not really sustainable.
    - So, what next?



# AES Corporation in Kazakhstan

- Next: build efficient & clean power plants in developing world.
  - Kazakhstan plant
    - Bought 70% of country's largest power plant in 1996.
    - Antiquated, dirty Soviet plant operated at 20% capacity.
    - AES invested \$500 million to upgrade plant.



# AES Corporation in Kazakhstan

- How did it work out?
  - Kazakhstan buys all the power the plant can produce.
  - The alternative is buying expensive, unreliable power from Russia.
- Develop infrastructure
  - Build schools, etc.
  - Plant trees *locally*.



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# AES Corporation Worldwide

- Different kind of organization
  - Socially conscious culture.
  - Flat organization.
    - At most 3 layers of management separate CEO from plant workers.
    - Top executives spend a week each year working on plant floor.



# AES Corporation Worldwide

- AES today.
  - 21,000 employees in 17 countries
  - \$14 billion annual revenues
  - World's Most Ethical Company, 2016



# World's Largest Solar Farm

- Longyangxia Dam Solar Park, China
  - 850 MW, 4 million panels
  - Can power 200,000 households



# World's Largest Wind Farm

- Gansu Wind Farm, China
  - 7000 turbines, 20 GW by 2020
  - Partly idle, due to distance from cities
  - 92,000 turbines in China, 145 GW
  - 1/3 of world's wind turbines



# Tea Growers in Kenya

- Small tea farmers in Kenya
  - Most highly-paid in the world.
  - Environmentally responsible agriculture
  - Kenya is 2<sup>nd</sup> largest tea exported in the world
  - Managed by private company KTDA Ltd
- Worker capitalism
  - Farmers own tea companies managed by KTDA Ltd



# Tea Growers in Kenya

- History
  - After Kenyan independence in 1963, Jomo Kenyatta set up Kenya Tea Development Authority (KTDA)
  - Number of small farmers increased 10-fold
    - Processing plants managed by local people



# Tea Growers in Kenya

- History
  - Kenya's own tea auction replaced London auction
    - To save cost of middlemen
    - Became 3rd largest tea auction in the world
  - KTDA privatized in 2000 to form KTDA Ltd.



# Tea Growers in Kenya

- Worker capitalism
  - Farmers bought shares of processing plants managed by KTDA.
    - Paid for their shares with a fraction of their tea production.
    - Management board elected by farmers.



# Tea Growers in Kenya

- Worker capitalism
  - Farmers receive dividends as well as payment for tea.
    - Farmers receive highest price in the world for tea produced by small farmers.
    - Farmers received 75% of auction price.
    - 500,000 farmers by 2013.



# Tea Growers in Kenya

- Sustainability through inclusion
- Farmer field schools
  - 4300 schools
    - Quality management (“fine plucking”)
    - Sustainable practices



# Tea Growers in Kenya

- Sustainable practices
  - Reduced pesticides
  - Soil management
  - Compost piles
  - Water & waste management
  - 13 processing plants certified by Fairtrade Foundation
- Food crops added
  - Cabbage, tomatoes, etc.
  - Helped relieve food shortages



# Tea Growers in Kenya

- Problems

- Still used fertilizer, largely from Russia
  - Fertilizer price shot up 2010-2014 due to high oil price
  - Reduction of fertilizer had little effect on yield.
- Climate change
  - More droughts, frost, storms,
- Some farmers want to return to government ownership
  - And receive government price supports.



# Tea Growers in Kenya

- Financing
  - Small loans, up to 30% of tea delivery
  - ...from subsidiary of KTDA
  - Loans finance farm tools, etc.
  - About 20,000 loans per year



# Tea Growers in Kenya

- Energy
  - Factory fuel switched from diesel to wood
  - Trees planted for wood, 620 hectares per factory



# Tea Growers in Kenya

- Energy
  - Some factories switched to biomass
    - Sawdust from mills
    - Rice husks, etc., from farms
    - Reduced fuel cost about 50%
  - Switched from kerosene lighting to solar power
    - Farmers paid for solar systems in installments
    - 60,000 efficient cooking stoves installed



Patrick Maina Kimari

## **Biomass Based Cogeneration In Ktda Managed Tea Factories**

A Technical and Economic Assessment

LAP LAMBERT  
Academic Publishing

# Affordable Housing in Mexico

- Vinte: an inclusive housing business
  - Inclusive business = sustainable business that benefits low-income communities.
  - Vinte = *Vivendas Integrales*.
    - Builds affordable, sustainable housing communities in central Mexico.



# Affordable Housing in Mexico

- Vinte: an inclusive housing business
  - Statement from CEO:
    - “What Vinte does is different... I stay with you. I sell you a home. I organize you socially. I sell you the furniture for your home. I sell you the technology for your home. I take care of the maintenance. And then I buy back your home to sell you a bigger one [as your family grows]. Thus our business model is a long-term chain.”



Sergio Leal, Vinte CEO

# Affordable Housing in Mexico

- Unique features of Vinte homes
  - Affordable
    - Price range US\$ 27,000 – 34,000
    - Kitchen, living room, 2 bedrooms, parking, services
  - Larger homes also available.
    - US\$ 34,000 – 62,000.



# Affordable Housing in Mexico

- Unique features of Vinte homes
  - Mostly lower middle-class buyers
    - School teachers, secretaries, factory workers
    - First-time buyers.
    - Grew up in settlements without proper access to water, electricity, roads.



# Affordable Housing in Mexico

- Unique features of Vinte homes
  - Amenities associated with posh housing projects
    - Clean water
    - Paved roads
    - Bike paths
    - Gated courtyards
    - Street lights
    - Playgrounds
    - Close to good schools & shopping



# Affordable Housing in Mexico

- Unique features of Vinte homes
  - Security
    - To deal with high crime rate of Mexican cities, especially burglary and kidnapping:
    - Security cameras
    - Walled and gated communities of 10-20 houses each



# Affordable Housing in Mexico

- Unique features of Vinte homes
  - Information technology
    - Computer and internet in every house
    - Community website with information
    - Online grocery ordering
    - Internet access to security cameras from home and work



# Affordable Housing in Mexico

- Unique features of Vinte homes
  - Environmental sustainability
    - Rooftop solar cells
    - Fluorescent bulbs
    - Solar water heaters
    - Rainwater catchment
    - Water-saving toilets and showers



# Affordable Housing in Mexico

- Financing
  - Mortgages
    - Mortgage financing through government agency INFONAVIT
    - Agency takes 5% of paycheck from employer
    - This is applied to down payment, monthly payments



# Affordable Housing in Mexico

- Financing
  - Outside support
    - INFONAVIT provides subsidy roughly equal to down payment.
    - International Finance Corporation (IFC) bought 10% stake
    - IFC and Inter-American Development Bank underwrote Vinte bond issues.
    - Loan from German bank DEG, etc.



# Affordable Housing in Mexico

- Financial success
  - 19<sup>th</sup> largest builder in Mexico
  - 15,000 homes by 2012.
  - Growth rate 22% during 2008-2013.



# Affordable Housing in Mexico

- Awards
  - *Financial Times* “Sustainable Investment of the Year,” 2012
  - IFC “Inclusive Business Achievement Award,” 2013.
  - Ernst & Young Leader Award for “Entrepreneur of the Year, Housing Sector,” 2010
  - Multiple National Housing Awards, 2005-2013.



# Sustainable Banking and Islamic Finance

# Sustainable Banking & Islamic Finance

- Sustainable banking
  - Sustainable banking vs. financial instability
  - Vancity in Canada
  - Triodos Bank in Netherlands
- Islamic Finance
  - Risk sharing
  - Unnecessary risk
  - Financial crisis of 2008
- Parallels
  - Sustainable banking meets Islamic finance



# Sustainable Banking

- Principles
  - Triple bottom line
    - People, Planet, Prosperity
  - Serves the real economy
    - Grounded in communities
  - Long-term relationships with clients
    - Understands their needs
  - Stable, self-sustaining
    - Resistant to outside disruptions
  - Transparent and inclusive governance



# Sustainable Banking

- Associations
  - Global Alliance for Banking on Values (GABV)
    - Source of principles on previous slide
    - Founded by
      - BRAC Bank, Bangladesh
      - GLS Bank, Germany
      - ShoreBank, US
      - Triodos Bank, Netherlands
  - Sustainable Banking Network (SBN)
    - Sponsored by International Finance Corporation (IFC)
  - National Community Investment Fund
    - Includes network of banks



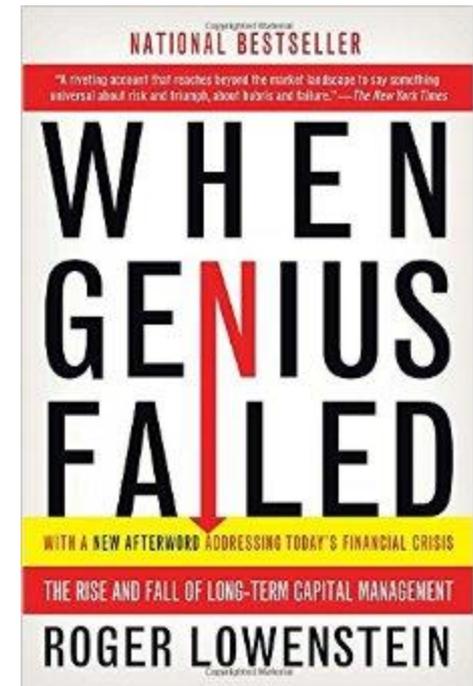
# Financial Instability

- Asian financial crisis, 1997
  - Affected the “Asian Tigers.”
  - Stock markets and currencies lost 70% of their value
  - Asset bubbles
  - Capital flight
    - China and Taiwan unaffected.
    - Due to family-based financing



# Financial Instability

- Long-Term Capital Management crisis, 1998
  - \$126 billion hedge fund
    - Principal shareholders: Nobel laureates Myron Scholes and Robert Merton
  - Highly leveraged arbitrage
    - Took advantage of securities that were incorrectly priced relative to each other.
    - Nearly collapsed when Russian ruble devalued.
    - Bailed out by banking industry.



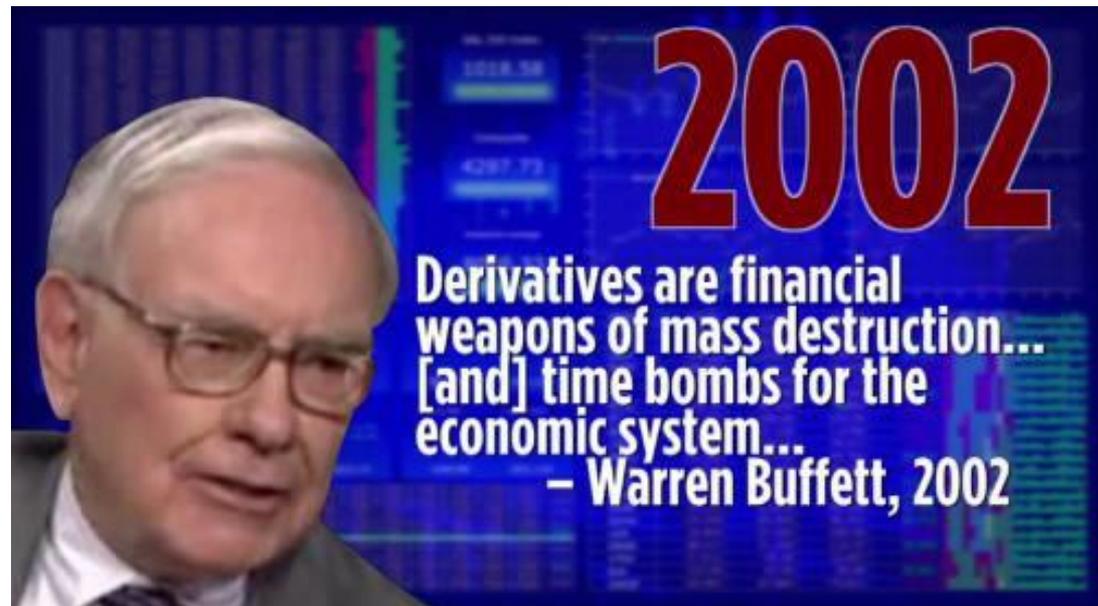
# Financial Instability

- Global Financial Crisis, 2008
  - Worst crisis since Great Depression of 1930s
  - Global impact lingers
  - Will discuss this one shortly



# Financial Instability

- Rise of derivatives
  - Bets on other securities
    - Futures, options, interest rate swaps, credit default swaps, forward contracts
  - Total nominal value:  
US\$1200 trillion
    - 10 x annual world GDP



# Financial Instability

- Next crisis: bail-ins, not bail-outs
  - Bail-in = investors, creditors and depositors take a “haircut” (i.e., a loss) on their assets
  - Greek crisis (2010-present) is a precursor



# Vancity in Canada

- Vancouver City Savings Credit Union
  - Started 1946 with \$22 investment by founders.
  - First community-wide credit union in Canada.



## Vancity in Canada

- Priority for community investment.
- Loan decisions based on character as well as financial assets.
- Today, Canada's largest community credit union, \$17 billion in assets.



# Vancity in Canada

- Early achievements
  - 1946 First to finance mortgages in **low-income** sections of Vancouver.
  - 1959 First in Canada to issue **open mortgages**
  - 1961 First in Canada to lend to **women** without male cosigner.
  - 1986 Canada's first **socially responsible** mutual fund.
  - 1994 Shared Success Program, returns 30% of profits to **community development**.
  - 2003 First preferred rate for **low-CO<sub>2</sub> cars**.

## Vancity in Canada

- Tamara Vrooman, CEO:
  - “The public is calling for changes in the financial system in response to the excesses and failures of recent years.”
  - “People are hungry to hear about ideas that move us beyond the banking meltdown and economic crisis to a banking system that ... puts the **needs of people and their communities** first.”



## Vancity in Canada

- “Sustainable banks allocate almost twice as much of their balance sheet to lending to the **real economy** than the GSIFIs.”
  - GSIFIs = 28 Global Systemically Important Financial Institutions (i.e., too big to fail).
- Sustainable banks have “better quality capital, better returns on assets and equal returns on equity...and higher levels of growth.”



# Vancity in Canada

- Recent milestones
  - 2010 Joins Global Alliance for Banking on Values
  - 2011 Largest **Living Wage Employer** in Canada (\$20/hr in Vancouver).
  - 2013 Receives **national award** for Resilient Capital Program.
  - 2016 Ranks **no. 2** on Forbes list of **best employers** in Canada
  - 2016 Ranks **no. 1** among Canada's 50 **best corporate citizens**.

# Triodos Bank in Netherlands

- One of the best known sustainable banks
  - Conceived in 1960s
    - Finally chartered in 1980.
    - Name is from Greek for “3 ways”
    - Based on 3 areas of society defined by anthroposophy (economy, rights, culture/spirit)
  - Focus on socially responsible investing
    - But also concerned about stability
    - Was remarkably unaffected by 2008 financial crisis.



Triodos  Bank

# Triodos Bank in Netherlands

- CEO Peter Blom:
  - His views are remarkably aligned with Islamic financial principles.
    - “If banks become the market, they crowd out the **real economy** because it becomes easier to **make money with money** than by producing things or delivering services. Opportunistic bankers like banks because they can **privatize the profits and socialize the losses**. That game has been over since 2008, and should be over.



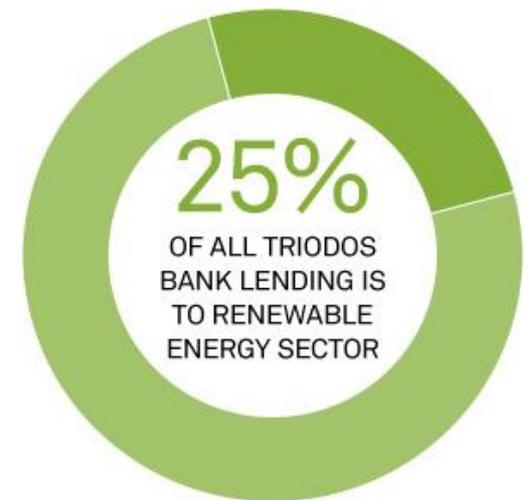
# Triodos Bank in Netherlands

- CEO Peter Blom:
  - “Therefore, there has to be a new idea of what a bank is about... Playing in the market, thinking you can **make money with money** and be very bright in using tricks, that’s not where you should gain your fulfillment. I think we have to see that there can be fulfillment from things like making an entrepreneur successful, in a serving way.... What we have to prove is ... that the **real economy** is as exciting as banking that plays with money in **abstract markets**.”



# Triodos Bank in Netherlands

- Major initiatives
  - Wind Energy Fund
    - Inspired by depositors who were concerned about Chernobyl nuclear plant disaster in 1986.
    - First bank in Europe to create an investment product focusing on clean energy.
    - Financed a Danish windfarm with the help of other investors.
    - Investments have grown to € 6.8 billion.



# Triodos Bank in Netherlands

- Major initiatives
  - Microfinance Investment Funds
    - First investment in microfinance was through a South African bank in 1994.
    - Top management met with Muhammad Yunus of Grameen Bank in 1995.
    - Created 2 private microfinance funds.
    - Created public Fair Share Fund Microfinance Fund in 2009.

EUR 360 million

Since 1994, our assets under management in the microfinance sector have increased to EUR 360 million, making us one of the leading investors in the industry.

# Triodos Bank in Netherlands

- Major initiatives
  - Fair Trade Fund
    - Inspired by South American debt crisis of 1990s.
    - Created 2008 to support producers too large for microfinance but too small for ordinary bank loans.
    - Favors fair-trade and organic farming cooperatives

Geographical specification  
(as % of total EUR transacted in 2015)



LATIN AMERICA 65%  
AFRICA 23%  
MIDDLE EAST 7%  
ASIA 5%

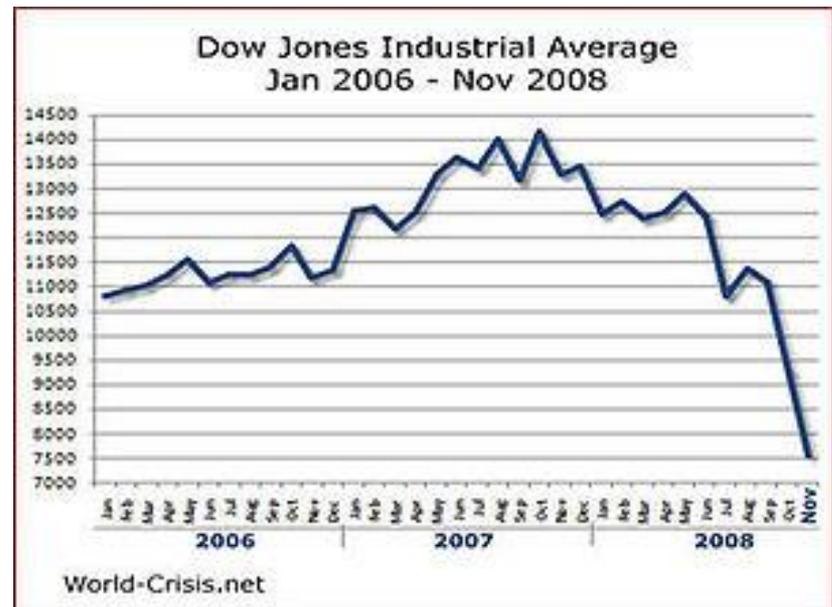
# Islamic Finance

- Islamic finance is based on ethical principles.
- ...rather than solely on market principles, as in Western finance.



# Islamic Finance

- Islam sees ethical problems with Western financial markets.
  - Wealth inequality.
  - Instability due to speculation.



# Islamic Finance

- Islam sees ethical problems with Western financial markets.
  - Repeated financial crises



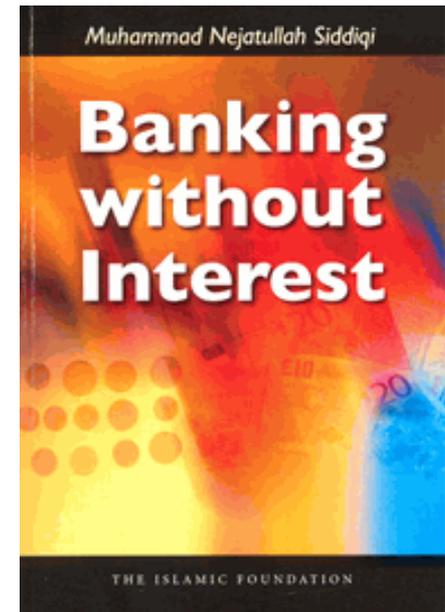
# Islamic Finance

- Let's focus on ethics underlying Islamic finance
  - ...rather than technical details
- Then examine its implications for sustainable banking.



# Islamic Finance

- Islamic finance is based on 2 related principles:
  - Risk sharing
    - Avoidance of interest (*riba al nasiah*)
  - Avoidance of unnecessary risk (*gharar*).
- Sources: *fataawa* attached to Islamic banking websites.



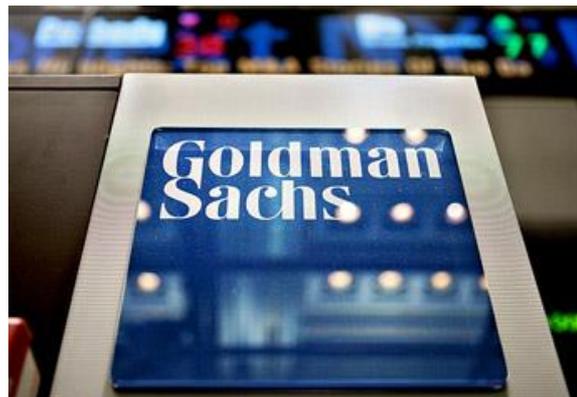
# Risk Sharing

- Prohibition of *riba al-nasiah* or interest.
  - It is wrong to collect a fixed and guaranteed interest rate on a loan.
    - Even to cover inflation.
    - According to most scholars, equally wrong to pay interest if it is avoidable.
    - Don't **make money from money**.



# Risk Sharing

- Why is interest wrong?
  - Allows banks and other lenders to accumulate too much power
  - “Too big to fail.”
  - Lenders share too little risk.

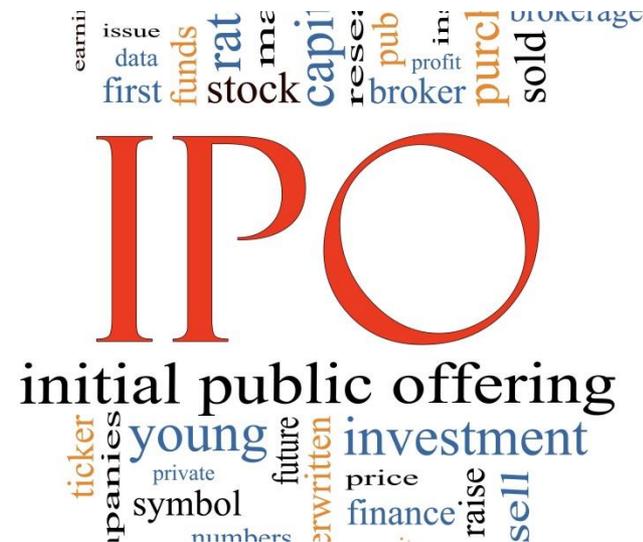


# Risk Sharing

- Underlying justice argument
  - Those who have lucky enough to be wealthy are *stewards* of the wealth rather than *owners*.
    - They are given wealth so that they can *use it* to benefit others.
  - In banking, this requires taking some of the risk
    - Otherwise the wealth primarily benefits the bank.

# Risk Sharing

- Investment is good.
  - Assets should not sit idle.
    - But investors should share the risk.
  - Capital gains are OK.
  - Stocks and mutual funds are OK.
    - If they represent *halal* companies



# Risk Sharing

- Time value of money is recognized.
  - For example, Islamic mortgage.
    - A type of *murabahah*.
    - The bank buys the house you want for an amount X.
    - You pay in installments that add to more than X.
    - The bank retains ownership until you complete payments.
    - Bank assumes risk of defects/casualty.
    - Not interest, because (ideally) no penalty for late payments.



بنك دبي الإسلامي  
Dubai Islamic Bank

# Risk Sharing

- Avoid preferred stock.
  - Priority in payment of dividends.
  - Not enough shared risk.



COMMON SHARES  
VS  
PREFERRED SHARES

# Risk Sharing

- Don't hold liquid assets.
  - Plant and equipment OK.
  - Avoid cash, accounts receivable and short-term investments.
    - These make money from money rather than from productive capital.



# Unnecessary Risk

- Avoid unnecessary risk and speculation
  - Risk that is part of life is OK.
    - Starting a business, raising a family, etc.
  - Unnecessary risk is wrong.
    - Casinos, betting on horses.



# Unnecessary Risk

- Underlying justice arguments
  - Life is unfair enough already
    - It is unfair for wealth to be distributed on the basis of finance.
    - Let's don't make it worse.
  - Speculation is unproductive
    - Creates instability
    - Merely transfers wealth



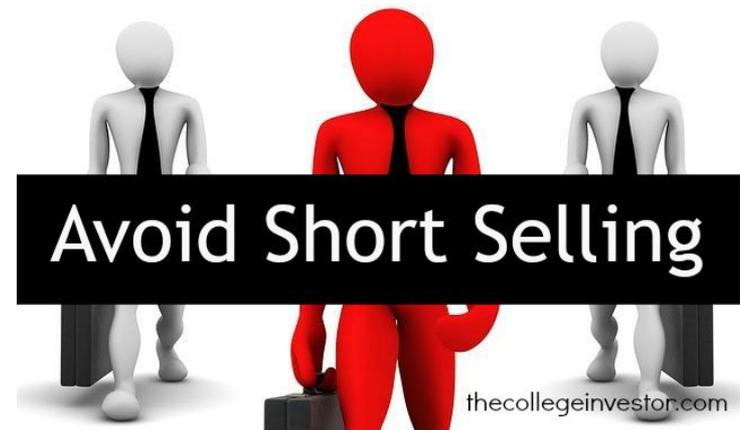
# Unnecessary Risk

- Transactions should be based on known prices.
  - No derivatives.
    - No betting on the future value of other assets.
  - For example, no futures or options.
    - These give the right to buy or sell an asset whose market price at the time of exchange is unknown.



# Unnecessary Risk

- No short selling.
  - Don't sell what you don't own.
  - Short selling = selling stocks owned by your broker
    - To hedge against falling prices.
    - See *The Big Short* movie.



# Unnecessary Risk

- Insurance is OK
  - But should not involve interest earnings
  - Insure only against necessary risk.
    - Avoid credit default swaps as insurance against speculation.
  - Islamic insurance (*takaful*) seen as risk sharing rather than paying a company for coverage.



# Unnecessary Risk

- *Invest* in stocks rather than *speculate*.
  - Too much *churning* in the stock market.
    - Day trading increases volatility.
  - Capital flight from developing countries.
    - Asian financial crisis.



# Financial Crisis of 2008

- A study of what can go wrong in Western finance.
  - Lack of risk sharing.
  - Excessive risk.
- Could not have occurred under Islamic financial principles.



# Financial Crisis of 2008

- Began with subprime mortgage loans in USA, early 2000s.
  - 20% of mortgage market
  - **Interest-bearing** loans
  - Borrowers failed to meet normal standards.



# Financial Crisis of 2008

- Lenders immediately sold mortgages to big banks
  - Repacked as mortgaged-backed securities and CDOs
    - Collateralized debt obligations
    - Some tranches OK, others subprime
  - Lenders too little risk and neglected due diligence.
  - **No risk sharing.**



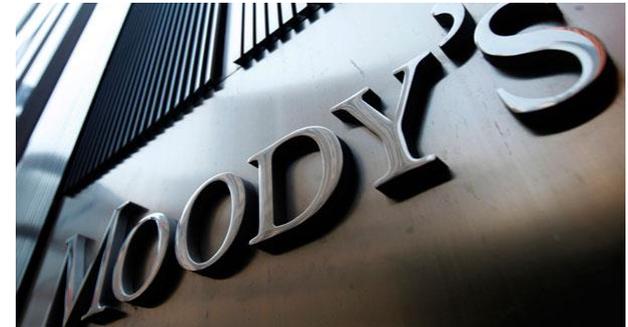
# Financial Crisis of 2008

- Big banks were already highly “leveraged.”
  - Risky investments with other people’s money, or borrowed money.
  - Allowed higher profits, but...
  - Banks would fail if market values declined slightly.
  - **Unnecessary risk**
  - **Too much speculation**



# Financial Crisis of 2008

- Ratings agencies gave CDOs triple-A ratings.
  - Banks pay agencies for ratings, resulting in conflict of interest.
  - Banks sold AAA-rated CDOs to unsuspecting funds worldwide.
  - Standard & Poor's finally indicted in January 2015



# Financial Crisis of 2008

- Credit default swaps gave the illusion of security.
  - \$62 trillion outstanding.
  - Form of insurance, but not regulated as such.
  - Sold without adequate capital reserves.
  - **Derivatives, insurance against speculation**



# Financial Crisis of 2008

- CDOs became “poison” in 2008.
  - Worldwide credit freeze.
    - Assets had no market price and could not be evaluated.
  - Highly-leveraged banks collapsed
    - Or threatened collapse.
  - Banks were too big to fail.
    - Massive bailout by taxpayers and U.S. Federal Reserve Bank
  - **No risk sharing**



# Financial Crisis of 2008

- Result: Worst global recession since Great Depression of 1930s.
  - The world is still trying to recover.



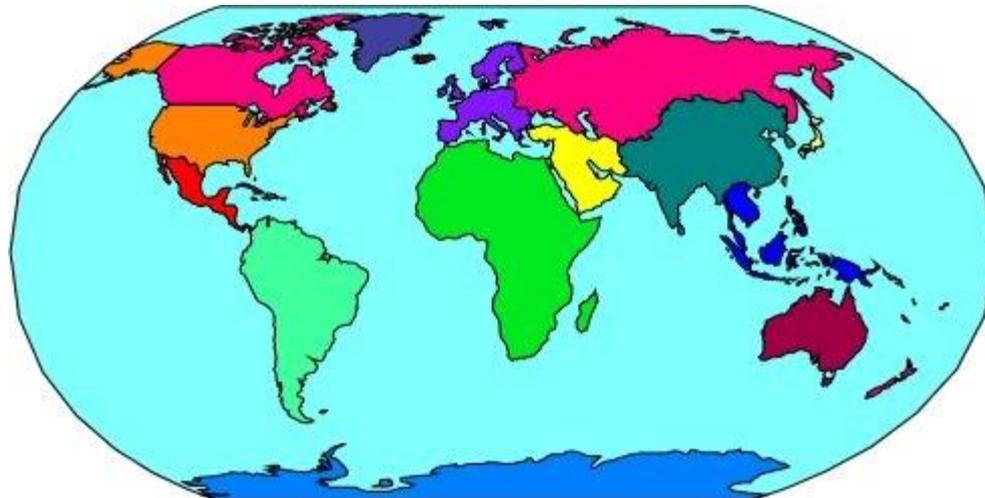
# Parallels

- **Sustainable banking meets Islamic finance**
  - Triple bottom line
    - We are stewards of our wealth
  - Serves the real economy
    - Focus on productive investment rather than gambling
  - Long-term relationships with clients
    - Make long-term investments
  - Stable, self-sustaining
    - Avoid derivatives and other forms of excessive risk
  - Transparent and inclusive governance
    - Share the risk

# Business Cultures Around the World

# Business Cultures

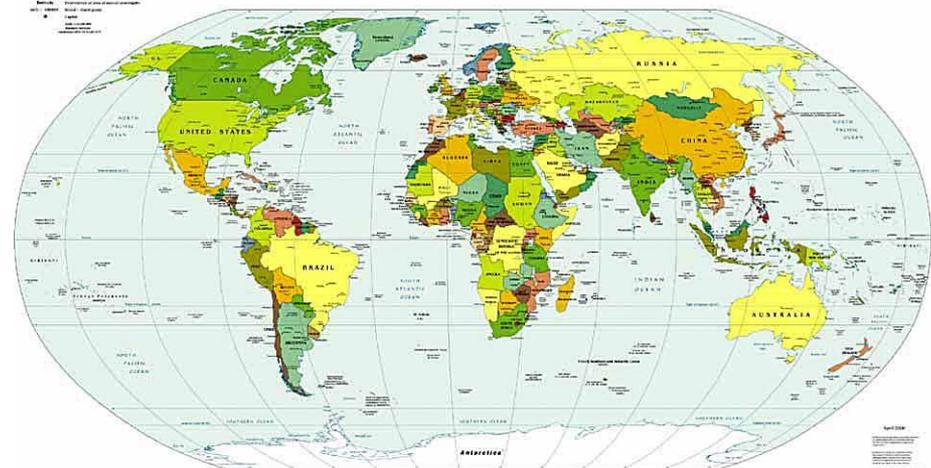
- Every culture has **ethical norms** that allow the culture to function.
- But cultures often operate **differently**.
- So they often have **different norms**.



# Business Cultures

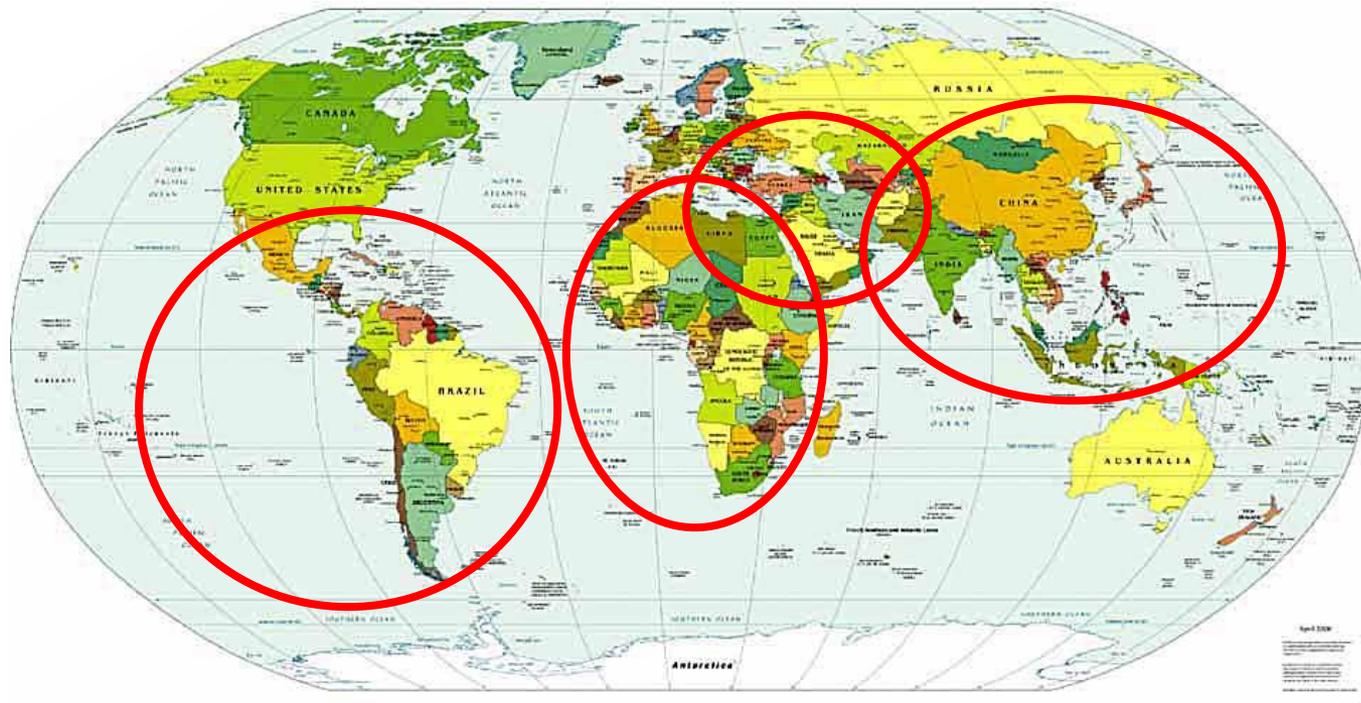
- There are 5000+ cultures in the world.
  - All very different.
- But they can be classified roughly as:
  - **relationship-based**
  - **rule-based.**
  - Note the color code

Political Map of the World, April 2000



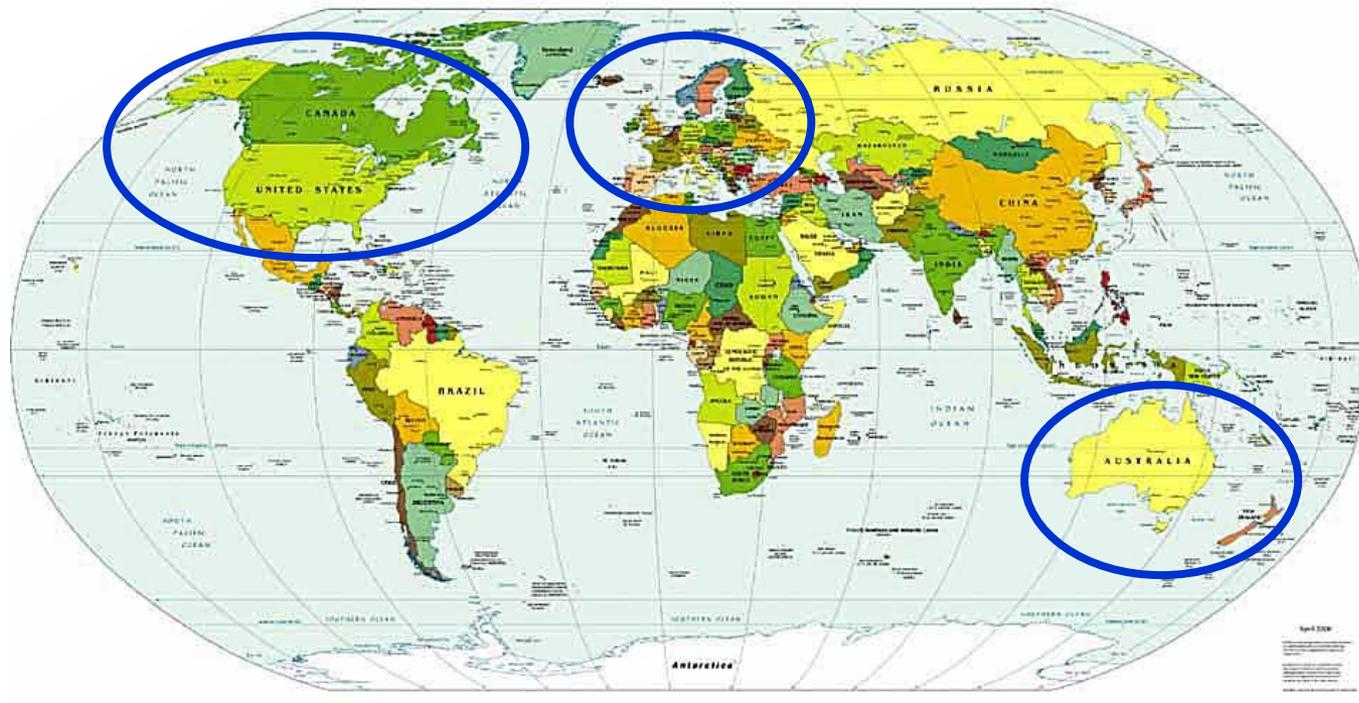
# Business Cultures

- Relationship-based
  - life is organized around **personal relationships.**



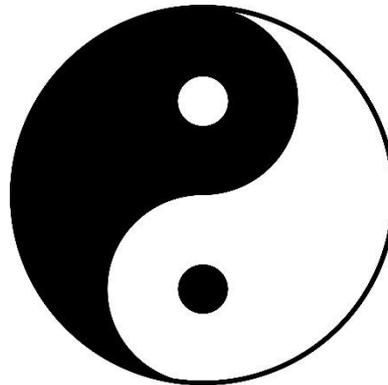
# Business Cultures

- Rule-based
  - life is organized primarily by **rules**.



# Business Cultures

- No culture is purely **rule-based** or **relationship-based**.
  - Nonetheless, one system tends to dominate.



# Business Cultures

- Relationship-based
  - Work through personal **connections**
  - Business = forming a relationship
    - Trust the **person**, not the system.



# Business Cultures

- Rule-based
  - Go by the **book**
  - Business = agreeing on a **contract**
    - Rely on the **system** to enforce the deal.



# Business Cultures

- Traffic
  - **Negotiate** your way through it
  - Follow traffic **laws**



Intersection in Varanasi, India

# Business Cultures

- Dealing with **stress**
  - Rely on family & friends for **support**.
  - Rely on the **system** and **oneself**
    - Medical technology, social services, psychiatry
    - Individual responsibility (even for illness)



Filipino family

# Business Cultures

- Concept of **self**.
  - I am part of a larger unit (**collectivism**)
    - Family, village, company, nation
    - We responsible for each other.
  - I am an autonomous individual (**individualism**)
    - I am responsible for myself.



# Business Cultures

- Relationship-based ethics
  - **Take care of** your friends and family
  - **Respect** your elders and superiors
- Rule-based ethics
  - Treat everyone **fairly and equally**
  - Respect the **rules**

# Sustainable Supply Chains

# Supply Chains

- ❁ Supply chains often stretch from a rule-based to a relationship-based culture.
  - ❁ Contractual specifications may not cross the cultural divide.

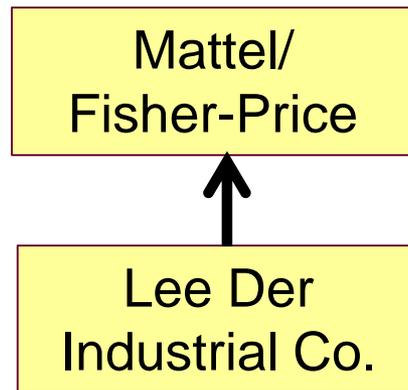


# Supply Chains

- ❁ In 2007, Mattel discovered that many of its toys were coated with lead-based paint.
  - ❁ Lead additive tastes sweet but is toxic to children.
  - ❁ Mattel recalled about 1 million toys.
  - ❁ Toys were sourced through a supply chain from China.
  - ❁ What went wrong?



# Supply Chains



Fisher-Price sourced from Zhang Shuhong, manager of Lee Der Industrial Company. Zhang was totally dedicated to his job. He even lived in a small room at the factory.



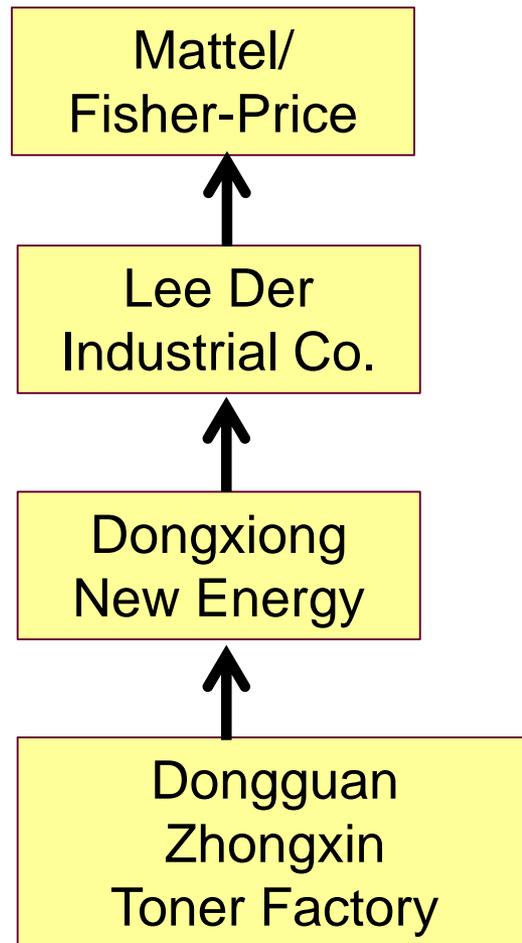
# Supply Chains



Zhang obtained paint from his trusted *guanxi* partner Liang Jiacheng at Dongxiong New Energy



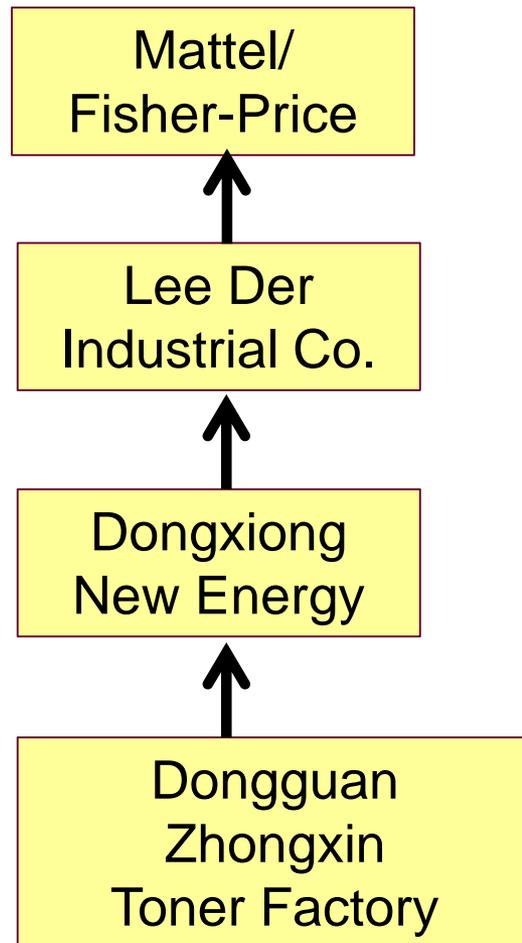
# Supply Chains



Liang was short of pigment and ordered it over the Web from people he didn't know.



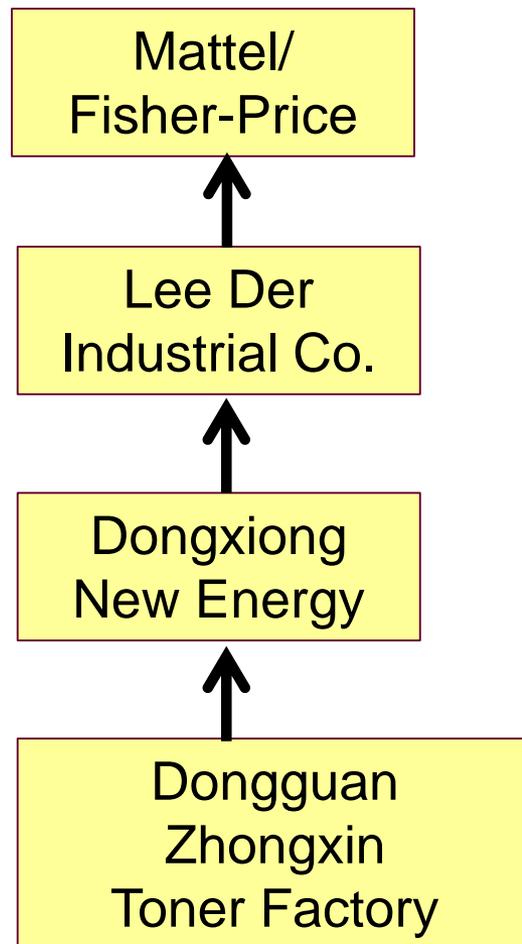
# Supply Chains



The supplier send lead-based pigment along with a forged certificate.



# Supply Chains



When Mattel discovered the problem, the Chinese government revoked Lee Der's export license. Zhang committed suicide.

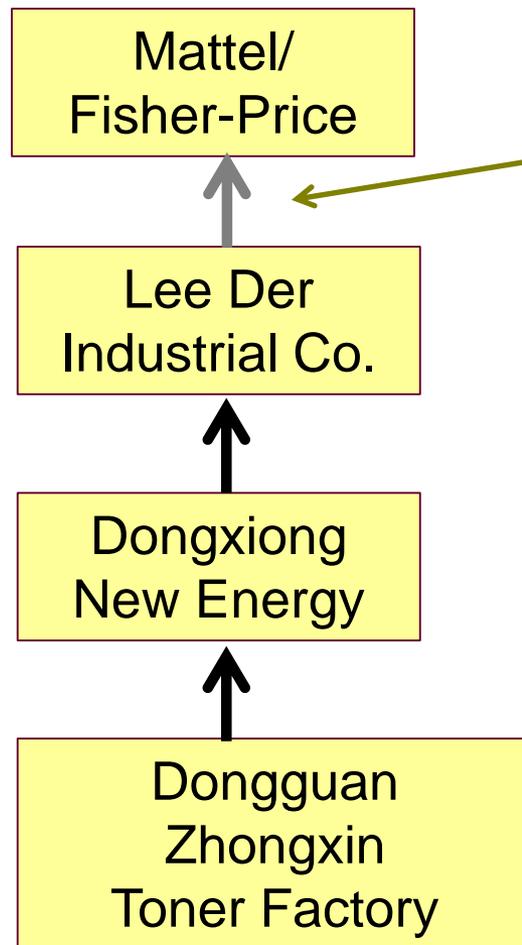


**Chinese Toy  
Exec Commits  
Suicide After  
Recall**

China banned exports  
from the company

Aug 13, 2007 7:59 AM CDT

# Supply Chains

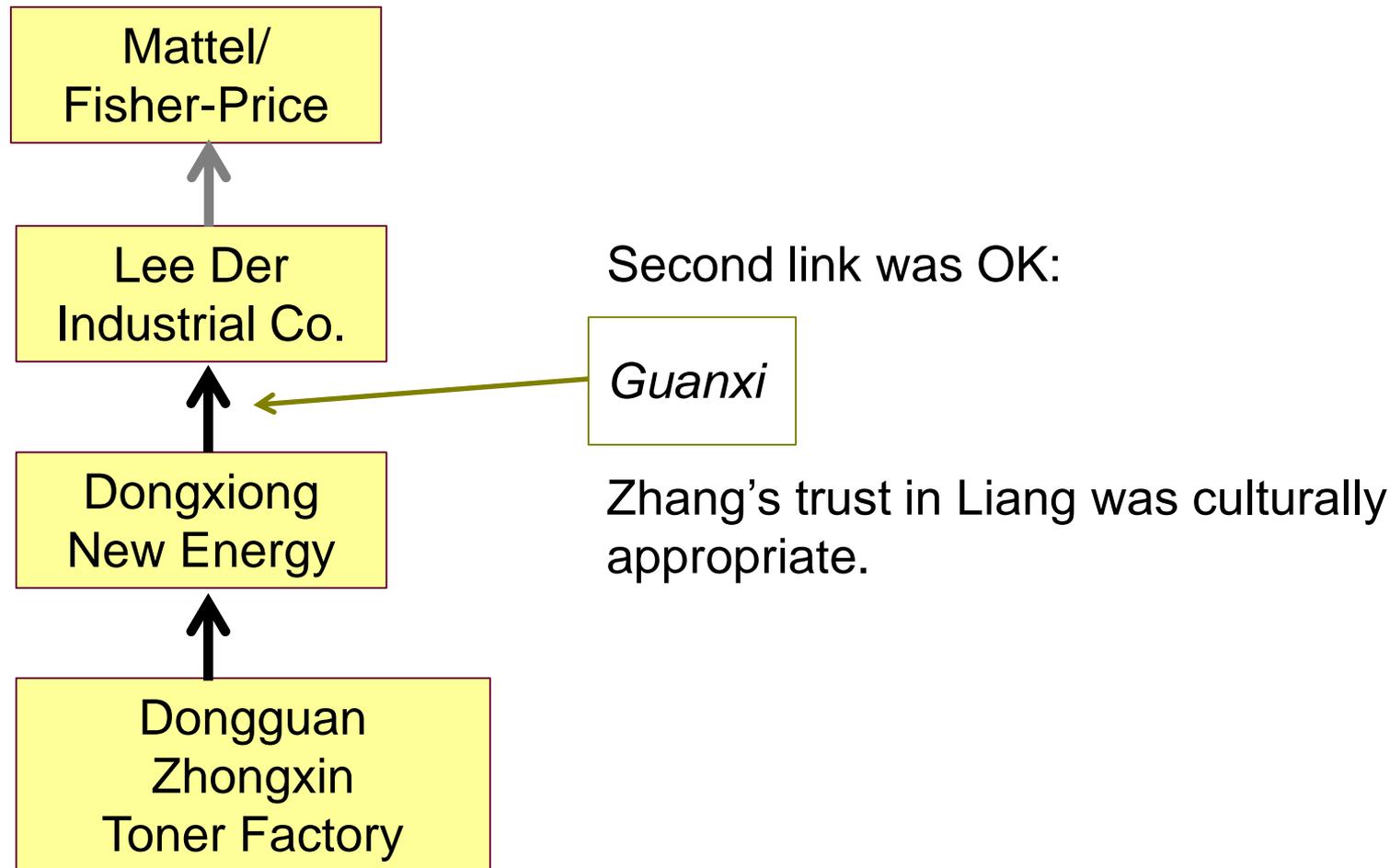


Transition from contract-based to relationship-based business.

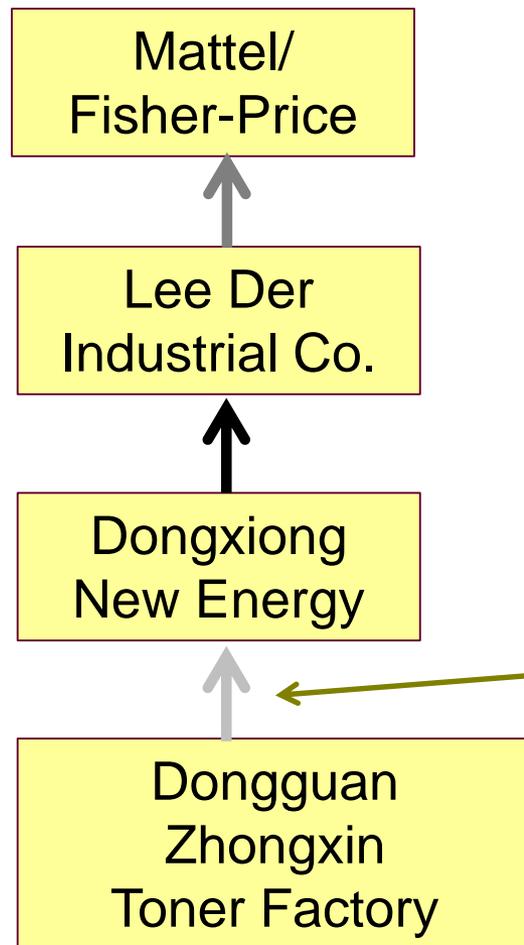
Zhang considered it sufficient to trust his supplier Liang.

A Fisher-Price purchaser who had *guanxi* with Zhang could have learned that Zhang was not performing lead-free certification as required by the contract.

# Supply Chains



# Supply Chains

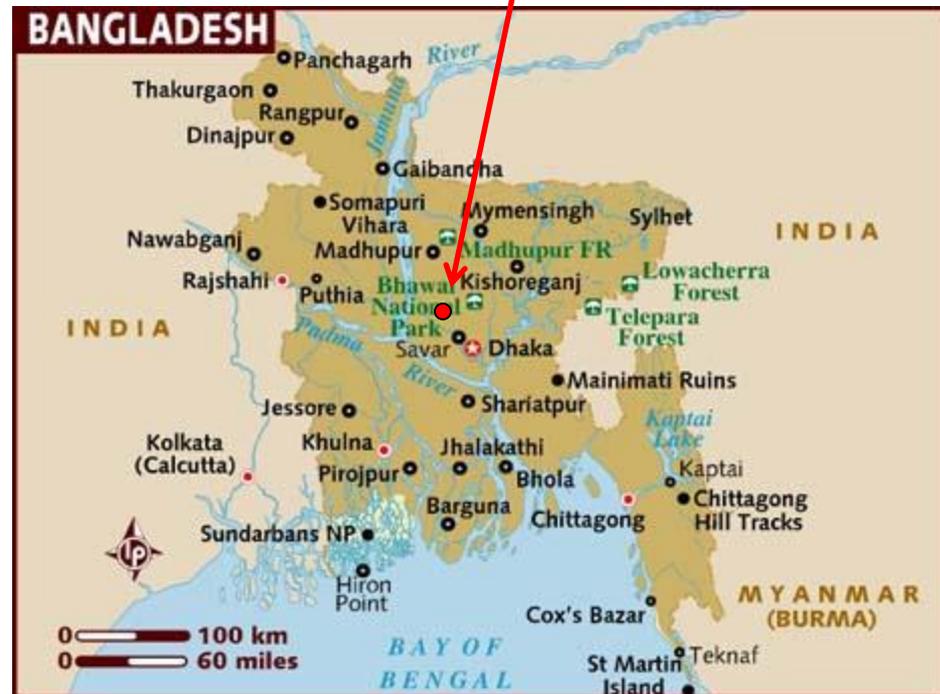


Chain broke at third link:

Culturally inappropriate trust of unknown party on the Web.

# Apparel Industry in South Asia

- ☉ In April 2013, garment workers in Rana Plaza heard a loud noise.
  - ❏ 8-story factory complex.
  - ❏ A large crack formed in the building.
  - ❏ An engineer urged everyone to evacuate.



# Apparel Industry in South Asia

- ❁ Sohel Rana refused to close the building.
  - ❁ Factory owners ordered workers to show up the next morning.
  - ❁ Or lose their jobs and several weeks back pay.



# Apparel Industry in South Asia

- ☉ At 8:45 am, the building collapsed.
  - ☒ 1129 workers killed, >2000 injured



# Apparel Industry in South Asia

- ❁ Worst disaster in history of garment industry.
- ❁ But not an isolated event.
  - ❁ 289 killed in factory fire, Karachi, Pakistan, Sept 2012
  - ❁ 25 killed in factory fire, Lahore, Pakistan, Sept 2012
  - ❁ 117 killed in factory fire, Dhaka, Bangladesh, Nov 2012.
- ❁ Common theme: unsafe working conditions.
  - ❁ Locked exits
  - ❁ No fire extinguishers
  - ❁ Building code violations



# Apparel Industry in South Asia

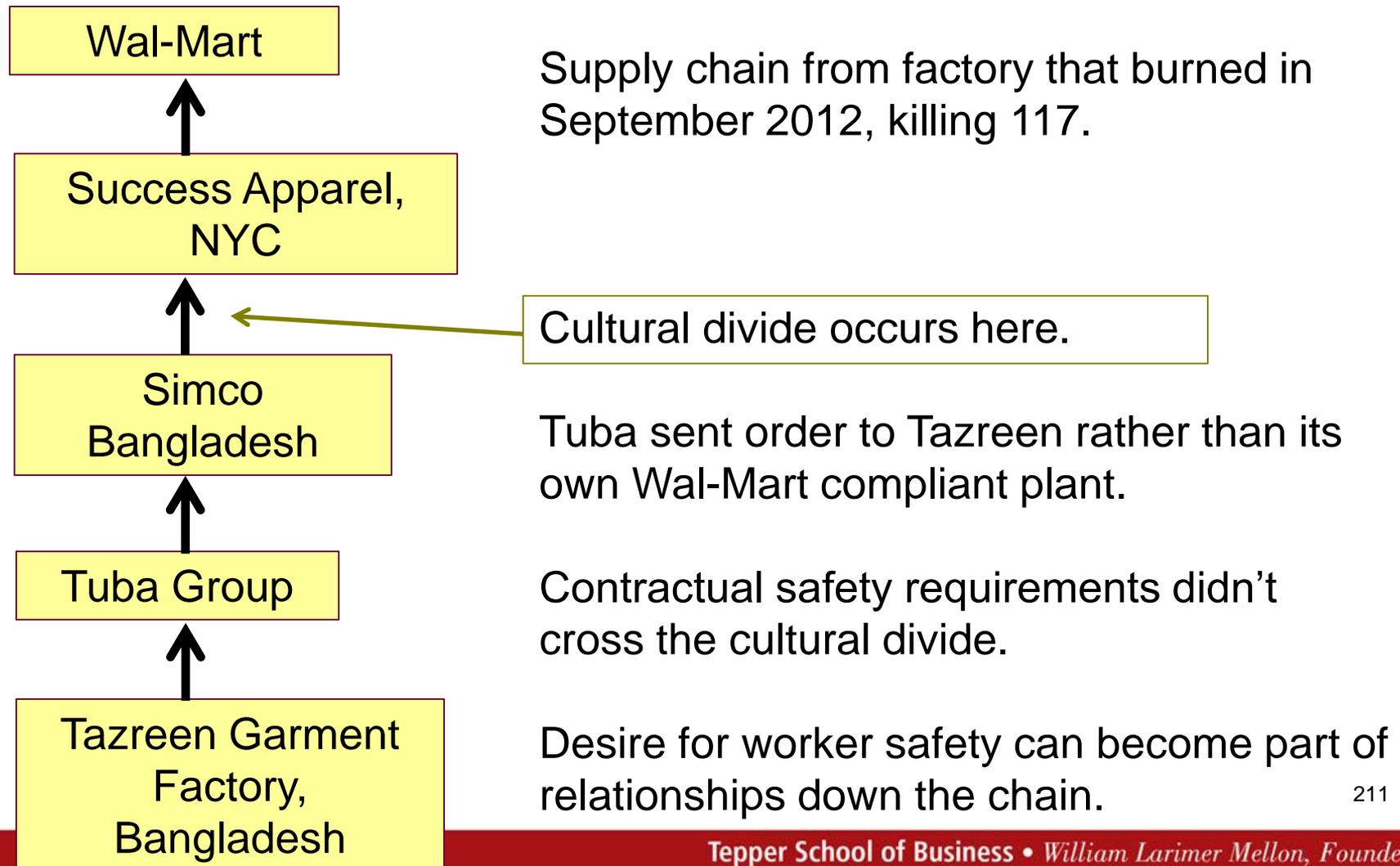
- Journalists found evidence in the rubble that Western firms were sourcing from these factories.
  - Most firms claimed they didn't know about it.



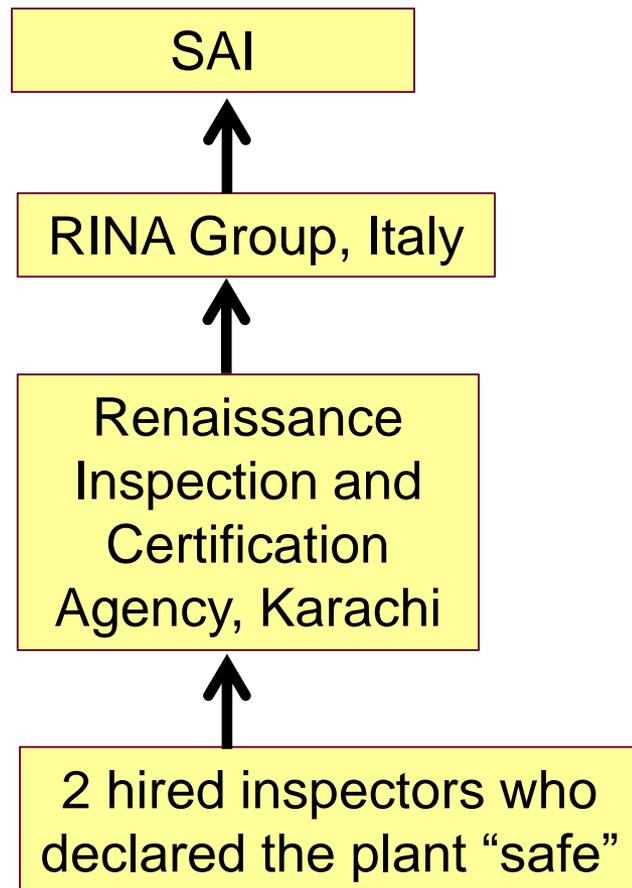
Calvin Klein



# Apparel Industry in South Asia



# Apparel Industry in South Asia



Third-party endorsement doesn't always work.

Karachi plant received prestigious SAI (Social Accountability International) endorsement only a month before it burned.

NGO endorsement is itself subject to supply chain problems.

# Apparel Industry in South Asia

- ☉ Relationships can also convey information about personal reputation.
  - ▣ This is key in relationship-based cultures.
  - ▣ Sohel Rana was a known corrupt political boss and drug dealer.



# Apparel Industry in South Asia

- ❁ The West can also get its ethical house in order.
  - ❁ Hold apparel firms responsible for working conditions in supplier factories.
  - ❁ Volunteer agreements are ineffective.



Seventy-five mainly European signatories guarantee to inspect clothing suppliers in Bangladesh... American firms are reportedly reluctant to join any industry accord that creates legally binding objectives.”

--*The Guardian*, 8 July 2013

# Li & Fung worldwide supply chain

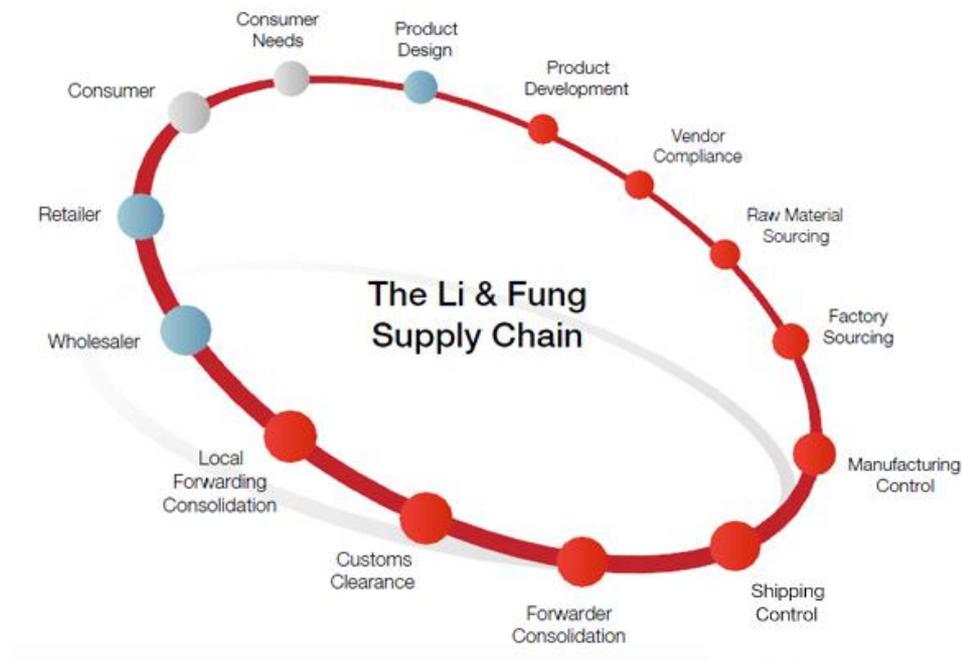
- A major supply chain manager
  - Sources from 40 countries.
- Shocked by disasters in Bangladesh.
  - Had sourced from one factory that burned.
  - Resolved that this would not happen again in its supply chains.



# LI & FUNG

# Li & Fung worldwide supply chain

- Manages entire supply chain for retailers
  - Does not own factories or retail outlets, based in Hong Kong.
  - Sources from 15,000 suppliers in 40 countries.



## Li & Fung worldwide supply chain

- Developed supplier code of conduct in 2000.
  - Fair treatment of employees
  - Freedom of association and collective bargaining
  - Safe and clean work places
  - Required inspection access to factories
    - Regular audits.
  - Threatened termination for noncompliance

# Li & Fung worldwide supply chain

- Compliance difficult to enforce
  - Variation in local laws
  - Cultural norms
  - Uncooperative suppliers
  - Pressure to deliver quickly and inexpensively



# Li & Fung worldwide supply chain

- Developments in China
  - 18 suicide attempts (14 successful) at one Foxconn plant in southern China
    - In response to bad PR, Foxconn nearly doubled pay.



Nets installed to catch  
suicide jumpers

# Li & Fung worldwide supply chain

- Developments in China
  - Rising wages in China were pushing production to outer provinces, Myanmar, soitherm Africa.
  - Growing middle class markets in China, India, etc.
    - Affluent consumers more sensitive to environment and working conditions.



# Li & Fung worldwide supply chain

- Li & Fung's response to sustainability concerns
  - In 2010, began to promote its sustainability efforts to customers
    - Reduced environmental footprint of suppliers
  - In 2011, Board of Directors formed Risk Management and Sustainability Committee



# Li & Fung worldwide supply chain

- Tazreen disaster, 2012
  - 1150 people were working overtime.
  - Multiple violations
    - Combustible fabric illegally stored on ground floor.
    - Inadequate exits.



# Li & Fung worldwide supply chain

- Tazreen disaster, 2012
  - Someone shouted “Fire!”
    - Factory owner said, “He is lying,” and padlocked the doors.
    - Managers ordered employees to continue working.
    - Some workers jumped from upper floors
    - Not to save their lives, but to preserve their bodies for relatives to find.
    - 112 perished.



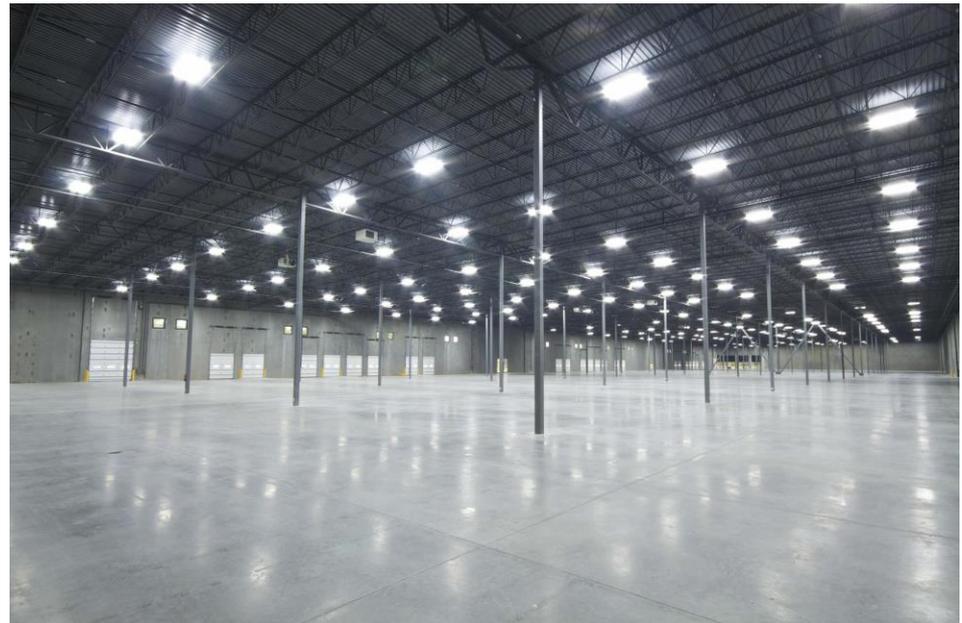
# Li & Fung worldwide supply chain

- New sustainability initiatives, 2014-present
  - Vendor Support Services
    - New business unit.
    - Fold in existing services.
    - Actively assist suppliers to meet Li & Fung's requirements.



# Li & Fung worldwide supply chain

- New sustainability initiatives, 2014-present
  - Recognizing new ethic in the industry
    - Major brands want to associate with worker safety.
  - New focus on energy efficiency
    - For example, LED lighting.
    - Sewing machines whose motor stops running when pedal not depressed.



# Li & Fung worldwide supply chain

- New sustainability initiatives, 2014-present
  - Lean production
    - Greater productivity leads to higher wages.
    - In one plant in India, wages increased from 1000 to 4000 rupees per piece.
    - This benefits local economy.
  - Sustainability emphasis part of overall restructuring.
    - This is the main payoff.



# Li & Fung worldwide supply chain

- New sustainability initiatives, 2014-present
  - Return to relationship-based management
    - William Fung: “There are many stakeholders in a company—especially your **colleagues** and **long-term**, suppliers, buyers and customers. We treat them as if they were **family**.”



# Sustainability vs Corruption

# Sustainability vs Corruption

- What is corruption?
- Kodak in Taiwan (kickbacks)
- The legal picture
- Enron in India (bribery)
- LKK in China (nepotism)
- Celtel in Africa (bribery)



# Sustainability vs Corruption

- ✪ Corruption is unsustainable by definition
  - ▣ It undermines the business system and its cultural support

WHAT  
IS  
CORRUPTION ?

# Sustainability vs Corruption

- ❁ Corruption is unsustainable by definition
  - ❁ It undermines the business system and its cultural support
  - ❁ **Relationship-based** and **rule-based** systems are corrupted in different ways.

WHAT  
IS  
CORRUPTION ?

# Sustainability vs Corruption

- ⊕ What is **corrupt** in one system may be **acceptable** in another.
  - ⊞ For example: **cronyism** may be OK in a **relationship-based** culture.
    - Cronyism = taking care of your friends first.
  - ⊞ But **cronyism** must be distinguished from **bribery**...

# Kodak in Taiwan

- ❁ U.S. manager was posted in Kodak's Taiwan branch.
  - ❁ He met with a team representing a potential Taiwanese supplier.



# Kodak in Taiwan

- ❁ U.S. manager was posted in Kodak's Taiwan branch.
  - ❁ He met with a team representing a potential Taiwanese supplier.
  - ❁ When the team left, he noticed that one of them left his briefcase.



# Kodak in Taiwan



- While looking for the owner's name, he found the case to be full of **cash**.

## Kodak in Taiwan

- ⊙ Kickbacks (“commissions”) are common in Taiwan but corrupting nonetheless.
  - ⊠ Why are they corrupting?



## Kodak in Taiwan

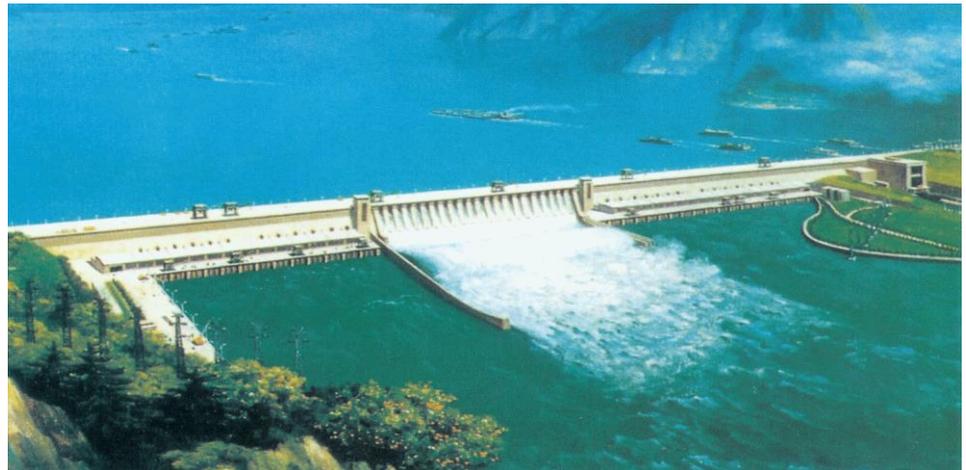
- ☉ Chinese/Taiwanese business is often based on *guānxi*.
  - ❑ Relationship of mutual obligation and mutual trust.
  - ❑ Legal enforcement is unnecessary.
  - ❑ Requires cultivation over a long period.
  - ❑ **A legitimate form of cronyism.**

关系



## Kodak in Taiwan

- ❁ Bribery **short-cuts** the process of building *guānxì*.
  - ❁ **Relationship-based** systems tend to slide into bribery.
    - As rule-based systems can slide into cheating.
  - ❁ Bribery/kickbacks do not provide the sustainable, long-term relationships required by a complex civilization.



Three Gorges Dam, Yangtze River

# Kodak in Taiwan

- ❁ What to do about the briefcase?
  - ❁ The manager dispatched a trusted subordinate to return the briefcase to the owner.
  - ❁ He sent a vaguely worded message to the owner's boss, stating that he was returning lost property.
    - The owner clearly got the cash from his boss.
    - Otherwise the manager would think the money was delivered.



# Kodak in Taiwan

## 🌀 Lesson:

- ❑ Cronyism is not the same as bribery.
- ❑ **Responsible** cronyism is sustainable and noncorrupting in a **relationship-based** culture.
  - Responsible = deal with friends because you trust them to deliver, not simply because they are friends.



# Kodak in Taiwan

## Lesson:

- However, cronyism is problematic in **government**.
  - Chinese civil service exams introduced by Han Dynasty >2000 years ago.



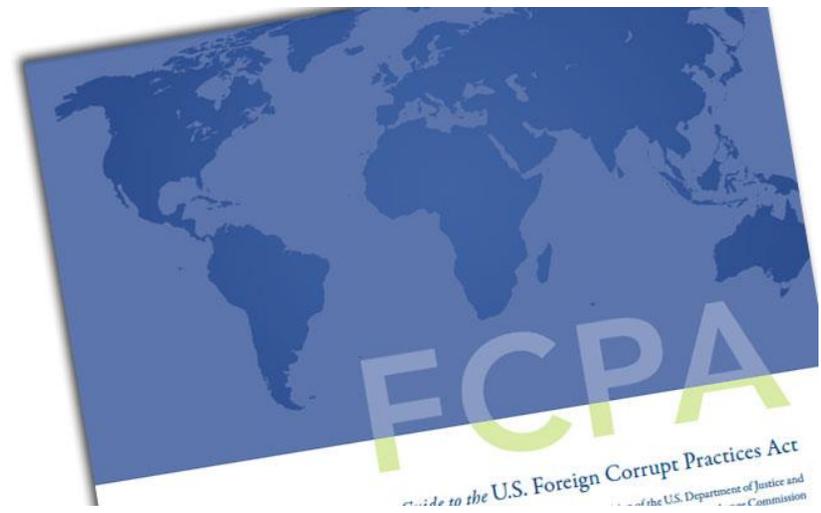
Ming Dynasty exam booths, 1873

# The Legal Picture

- ❖ Common legal distinction:
  - ❖ A **bribe** is a payment intended to influence a decision.
  - ❖ An **extortion** payment is required to obtain something to which you are already entitled (in a timely manner).
  - ❖ A **facilitating payment** is a small, routine extortion payment

# The Legal Picture

- ❖ Laws governing payments in *foreign countries*
  - ❖ U.S. Foreign Corrupt Practices Act (1977)
  - ❖ U.K. Bribery Act (2011)
  - ❖ These laws tend to govern international norms, with the UK act gaining influence.
  - ❖ Can extend to non-US, non-UK companies that operate in US,UK



# The Legal Picture

Legal requirement	US	UK
Prohibits paying bribes to foreign government officials	<b>Yes</b>	<b>Yes</b>
Prohibits paying bribes to individuals in private firms abroad	<b>No</b>	<b>Yes</b>
Prohibits receiving bribes in foreign countries	<b>No</b>	<b>Yes</b>
Prohibits facilitating payments in foreign countries	<b>No</b>	<b>Maybe</b>
A company is responsible for bribes paid or received by associated persons abroad (e.g. subcontractors)	<b>Ask your lawyer</b>	

# The Legal Picture

- ⊕ Payments/gifts may be illegal in the host country.
  - ⊕ Especially when government officials are involved.



# The Legal Picture

- ❖ Bribery law in UAE (applies domestically)
  - ❖ Penal Code Articles 234-239.
  - ❖ It is illegal to offer or give money or benefits to a **public official** in exchange for an act that is not part of his duties or in breach of his duties.
  - ❖ The prohibition extends to anyone who **mediates** the bribe.
  - ❖ One can avoid legal liability by **reporting** the bribe to authorities before it is discovered.
  - ❖ It is illegal for a manager, director, or employee of a **private institution** to ask, for himself or a third party, money or benefits in exchange for an act that is not part of his job or in breach of his duties.

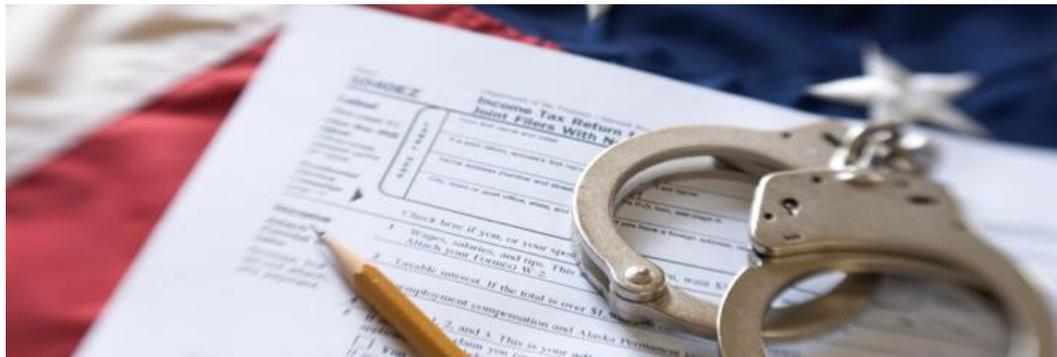
# Sustainability and Corruption

- ❁ Bribery is a natural weakness of **relationship-based** cultures.
  - ❁ It is a shortcut to relationship building.
  - ❁ Therefore, unsustainable.



# Sustainability and Corruption

- ☉ Cheating is a natural weakness of **rule-based** cultures.
  - ❑ Due to minimal supervision.
  - ❑ As in financial crisis of 2008.
  - ❑ Obviously unsustainable.



# Enron in India

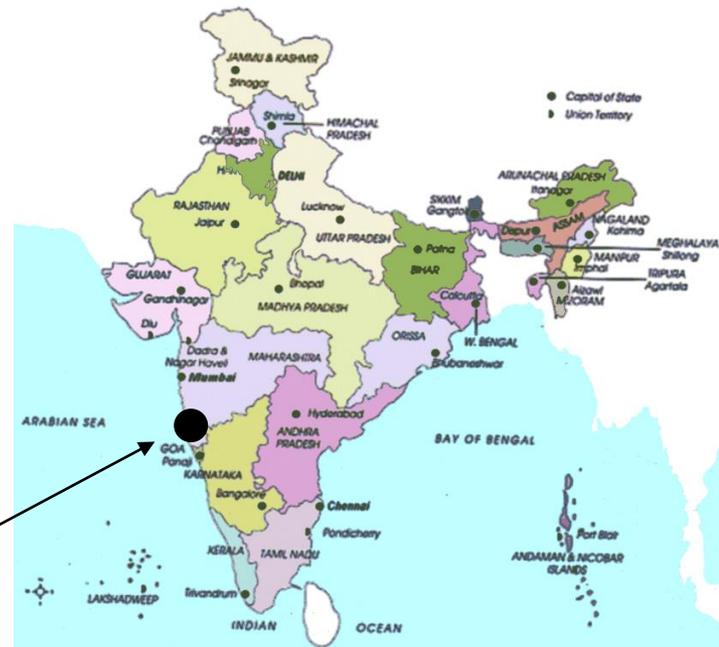
- ❁ The Dabhol electric power plant.
  - ❁ India's largest-ever private foreign investment.
  - ❁ Spearheaded by Enron (1992).
  - ❁ Bechtel & General Electric also involved.



# Enron in India

- 📍 Located at Dabhol in Maharashtra State (1992).
- 📍 Addressed growing Indian economy & unreliable electricity supply.
  - 🔍 Spearheaded by Enron executive Rebecca Mark.
  - 🔍 In principle, a brilliant idea.

Dabhol



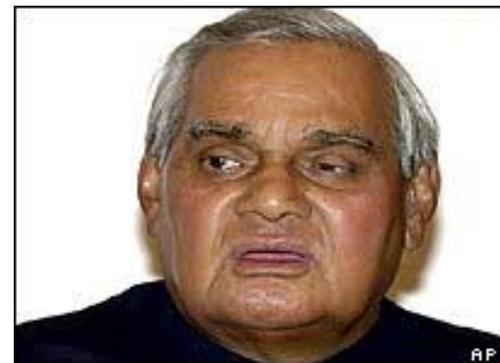
## Enron in India

- ❁ Rebecca Mark of Enron obtained guarantee of 25% ROI from Indian government.
  - ❁ Yet electricity price projected to be 2 to 5 times prevailing rate.
  - ❁ Due partly to reliance on LNG from Enron subsidiary in Qatar.
  - ❁ Some suspected **bribery** on Enron's part.



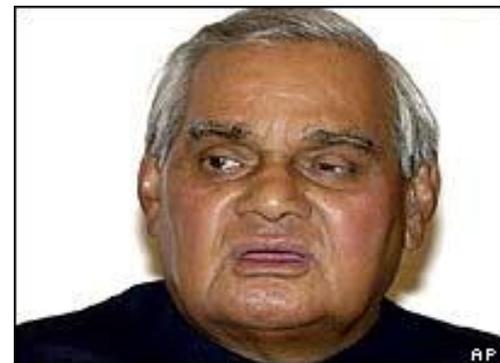
# Enron in India

- ❁ Indian political situation.
  - ❁ Congress Party was in political trouble.
    - Party of Nehru, Indira Gandhi, Rajiv Gandhi, Sonia Gandhi.
    - Accused of **corruption**.



# Enron in India

- ❁ Indian political situation.
  - ❁ Congress Party was in political trouble.
    - Party of Nehru, Indira Gandhi, Rajiv Gandhi, Sonia Gandhi.
    - Accused of **corruption**.
  - ❁ BJP (Bharatiya Janata Party) exploited Hindu nationalism & discontent with Congress party.
    - Hindu nationalists destroy Babri mosque at Ayodhya in 1992. Riots result in 2000 deaths.
    - BJP comes to power in 1998, with Vajpayee as P.M.



## Enron in India

- ❁ Enron's apparent bribery became an issue in BJP campaign.

- ❁ BJP leader Gopinath Munde stated...

- “It is reasonably clear that several unseen factors and forces seem to have worked to get Enron what it wanted.”

- ❁ Journalist Raghu Dhar reported that Enron offered him a lucrative job if he would stop criticizing the project.



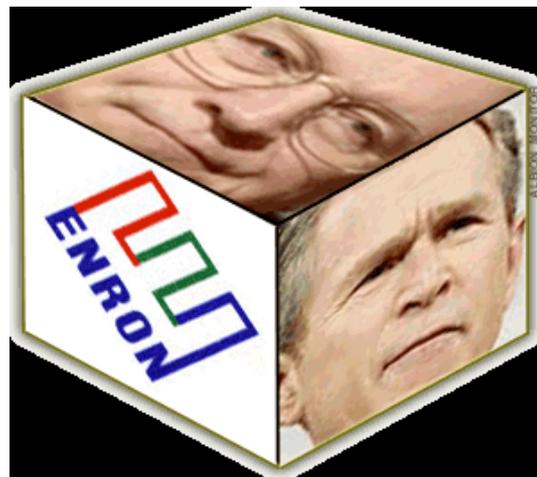
# Enron in India

- ✪ Much public protest.
  - ✚ Amnesty International cited rough treatment of demonstrators.



## Enron in India

- ❁ Indian government backed off from deal after BJP took power.
- ❁ Bush administration pressured India.
  - ❁ Visits from Dick Cheney, Colin Powell.
  - ❁ Dropped the matter after 9/11, Enron troubles.



# Enron in India

- ❁ Power plant sat mostly idle for years.
  - ❁ State-owned company took it over in 2006.
  - ❁ Resumed operations in 2010.



# Enron in India

## ☉ The lesson:

- ☒ Work through connections in India's **relationship-based** culture.
  - Family, friends of family, etc.
  - This is sustainable.
- ☒ *Bribery* is corrupting.
  - Bribery of government officials is illegal.
- ☒ Bribery  $\neq$  facilitating payments



# LKK in China

❊ Nepotism may or may not be corrupting.

- ❊ Nepotism = hiring or promoting your relatives.
- ❊ Often questionable in **rule-based** cultures.
  - May put an unqualified individual in the job
  - Viewed as unfair.
- ❊ May be functional in **relationship-based** cultures...



"Nepotism" is a polite way of saying  
"you have no chance in hell of ever being promoted."

# LKK in China

- LKK (Lee Kum Kee) food and health products.
  - Founded in rural Guangdong province in 1888.
    - By 2005, 3900 workers.
    - Markets in 80 countries.



# LKK in China

- ✪ Remains a family-run business.
  - ✚ Lee Man Tat is group chairman.
    - Appointed 4 sons to head company divisions after they studied in USA.
    - He was well aware of their talents/weakness and placed them accordingly.
    - Authority of father/uncle/grandfather in a Confucian culture can be an advantage for nepotism.



# LKK in China

## Lesson:

- Responsible nepotism need not be corrupting in a **relationship-based** context.
  - Responsible = hire relatives based on their loyalty to family and known talents, not simply because they are relatives



# Celtel in Africa

- Wireless service founded in 1998.
  - Mo Ibrahim (Sudanese) & Terry Rhodes (British)



**Terry Rhodes**  
Director

# Celtel in Africa

- ⊕ Wireless service founded in 1998.
  - ⊕ Mo Ibrahim (Sudanese) & Terry Rhodes (British)
  - ⊕ Purchased \$750K operating license, approval bogged down.



# Celtel in Africa

- ⊕ Wireless service founded in 1998.
  - ⊕ Mo Ibrahim (Sudanese) & Terry Rhodes (British)
  - ⊕ Purchased \$750K operating license, approval bogged down.
  - ⊕ Requested meeting with officials.
  - ⊕ Awkward silence after introductions.



# Celtel in Africa

- ☉ Fax had requested \$50K bribes for meeting.
  - ☒ Was sent to Amsterdam office that morning.



# Celtel in Africa

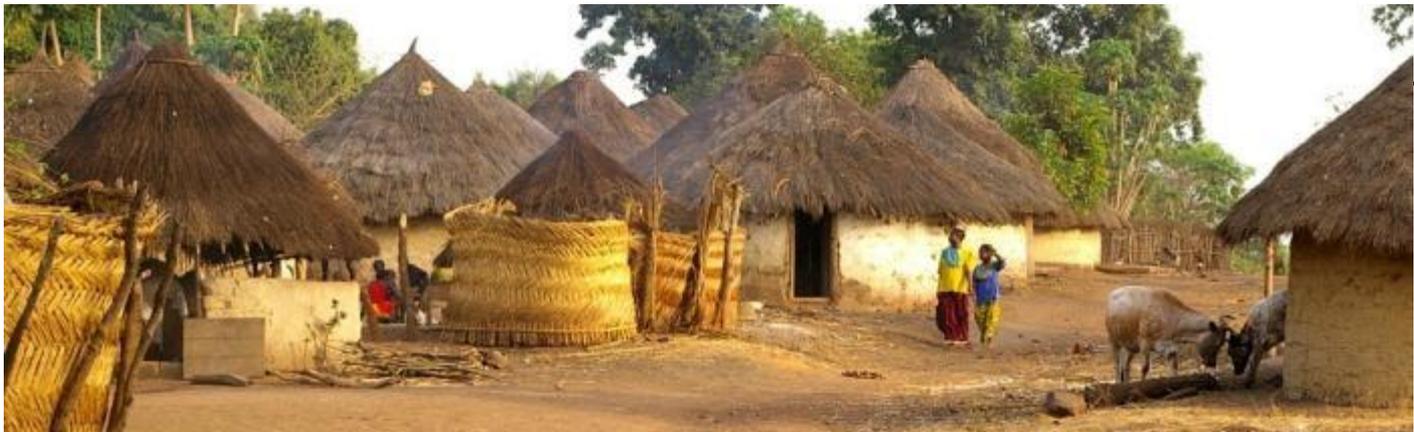
- ⊕ Celtel gave up on this country.
- ⊕ ...but found ways to avoid bribery elsewhere.
  - ⊕ Helped finance schools in lieu of payments to politicians.
  - ⊕ Organized event to publicize coming mobile phones.
    - Consumers pressured politicians to issue permit without further delay... or bribes.



# Celtel in Africa

## ✿ Lesson:

- ✿ Traditional African culture was sustainable for 1000s of years!
  - ✿ Rational redistribution of wealth through leader's patronage allowed villages to survive.
  - ✿ Bribery results from corruption of village leadership customs during colonial era.



# Conclusion

- ❁ Four perspectives on sustainability
  - ❁ Environmental
    - Energy, circular economy
  - ❁ Social
    - Inclusion, indigenous rights
  - ❁ Financial
    - Stability, the real economy
  - ❁ Corruption
    - Systemic

