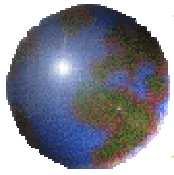


# *Information Technology and Cultural Deglobalization*

John Hooker

Carnegie Mellon University

AP-CAP, Bangalore, December 2008

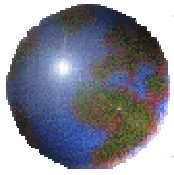


# *Thesis*

## ❖ Cultural deglobalization

- ❑ Information technology **reinforces** cultural differences.
- ❑ Part of a larger **economic** phenomenon.





# *Thesis*

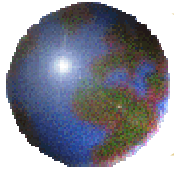
## ✚ Cultural deglobalization

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## ✚ Approach

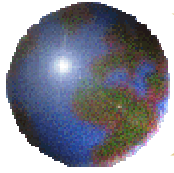
- ▣ Use concepts from **cultural anthropology**.





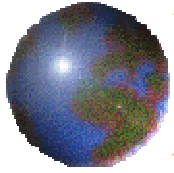
# *Outline*

- ⊕ A new economic order.
  - ▣ Based on **cultural comparative advantage**.
  - ▣ Drives cultural deglobalization



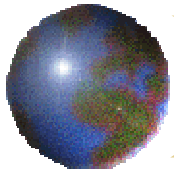
# *Outline*

- ⊕ A new economic order.
  - ▣ Based on **cultural comparative advantage**.
  - ▣ Drives cultural deglobalization
- ⊕ Roots of cultural difference.
  - ▣ **Relationship**-based vs. **rule**-based.
  - ▣ Information: **high-context** vs. **low-context**



# *Outline*

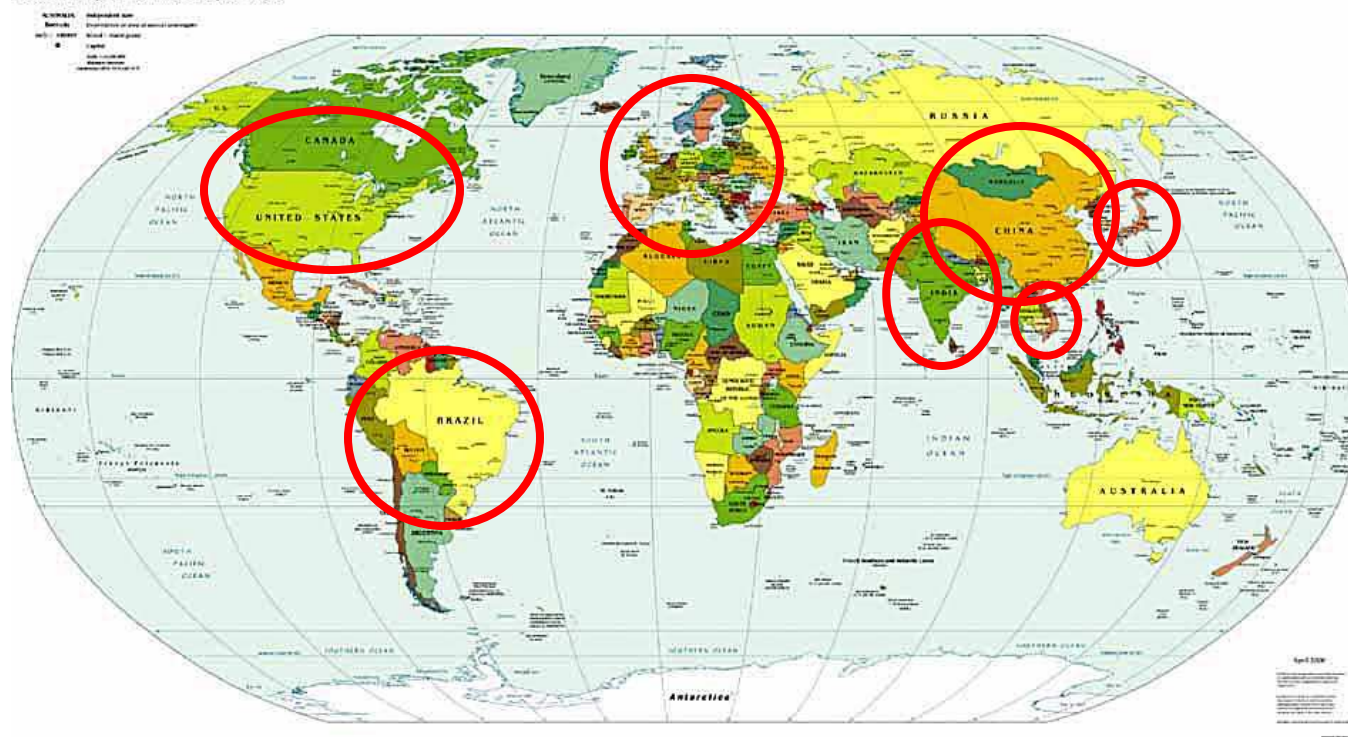
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- ⊕ Roots of cultural difference.
  - ▣ **Relationship**-based vs. **rule**-based.
  - ▣ Information: **high-context** vs. **low-context**
- ⊕ Role of information technology.
  - ▣ **Supports** high-context and low-context.
  - ▣ Technology-empowered **deglobalization**

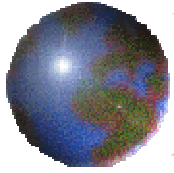


# *A new economic order*

- ⊕ Movement toward a **multi-polar equilibrium.**

Political Map of the World, April 2000

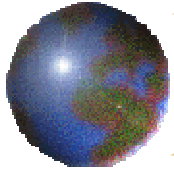




## *A new economic order*

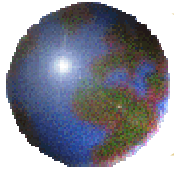
- Based on **comparative cultural advantage**.
  - Much more than “outsourcing.”
  - Many countries have cheap labor.
  - Only a few have become economic powerhouses.





## *A new economic order*

- Based on **comparative cultural advantage**.
  - Much more than “outsourcing.”
  - Many countries have cheap labor.
  - Only a few have become economic powerhouses.
- Such as...
  - Japanese quality.
  - Korean manufacturing.
  - Chinese entrepreneurship.
  - Indian information technology.
  - Western technological innovation.



# *A new economic order*

## ⊕ Japanese quality

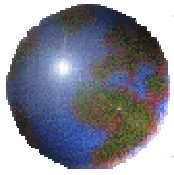
### ⊞ Continuous improvement

- Group oriented, rather than requiring individual reward.
- Maintain group harmony by honoring everyone's ideas.
- Long time horizon.
- *Nemawashi*



*Hanko* stamp

Traditionally a part of  
*nemawashi*



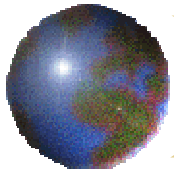
# *A new economic order*

## ■ Superior operations management

- Just-in-time inventory management
- *Kanban* systems minimize rework, maximize flexibility.
- Lean manufacturing, reduced setup times.



Toyota factory in Japan



# *A new economic order*

## ■ Superior operations management

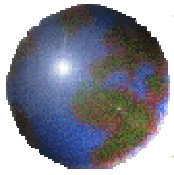
- Just-in-time inventory management
- *Kanban* systems minimize rework, maximize flexibility.
- Lean manufacturing, reduced setup times.

## ■ Outgrowth of *keiretsu* (formerly *zaibatsu*).

- Old-boy networks, trust relationships.
- *Keidanren*.



Toyota factory in Japan



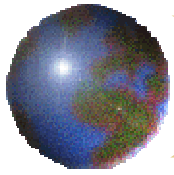
# *A new economic order*

## ❖ Korean Manufacturing

- ❖ Initially an imitation of Japanese *zaibatsu*.
  - High power distance culture allowed Park Chung Hee to create the *chaebol*.
- ❖ Cozy relationship between leading industrial families and the government
  - Allowed Korea to build major private corporations in a relationship-based culture.



Park Chung Hee  
Korean dictator 1961-79



# *A new economic order*

## ■ Loyalty to the boss.

- Paternal relationship.
- Bottom line and short-term profitability are secondary.



**LG**



**DAEWOO**

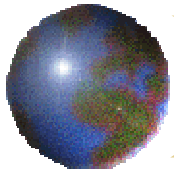


**HYUNDAI**



**SSANGYONG**

Korean *chaebol*



## *A new economic order*

- Loyalty to the boss.
  - Paternal relationship.
  - Bottom line and short-term profitability are secondary.
- Highly disciplined, hierarchical groups.
  - Organized by age.



LG



DAEWOO



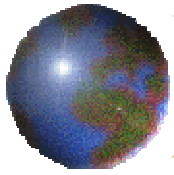
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## *A new economic order*

- Loyalty to the boss.
  - Paternal relationship.
  - Bottom line and short-term profitability are secondary.
- Highly disciplined, hierarchical groups.
  - Organized by age.
- Highly competitive, masculine culture.
  - Strong national solidarity.



**LG**



**DAEWOO**



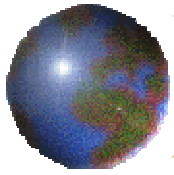
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# *A new economic order*

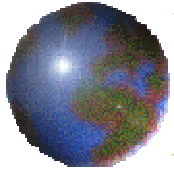
## ⊕ Chinese entrepreneurship

### ⊞ A cultural trait of coastal Chinese

- Particularly speakers of *Yuè* (Cantonese), *Mǐn* (Fujianese), and *Wú* (Shanghaiese) dialects.



Guangzhou

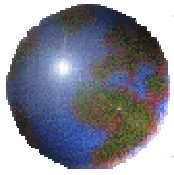


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- ⊕ Chinese entrepreneurship
  - ▣ A cultural trait of coastal Chinese
    - Particularly speakers of *Yuè* (Cantonese), *Mǐn* (Fujianese), and *Wú* (Shanghaiese) dialects.
  - ▣ Uncertainty tolerant culture.



Guangzhou



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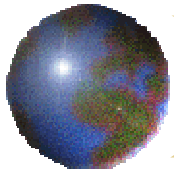
### ▣ Uncertainty tolerant culture.

### ▣ Self-esteem tied to wealth and status.

- “To be rich is glorious” (Deng Xiaoping).



Guangzhou



# *A new economic order*

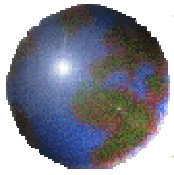
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Guangzhou

- Uncertainty tolerant culture.
- Self-esteem tied to wealth and status.
  - “To be rich is glorious” (Deng Xiaoping).
- Masculine culture, competitive.



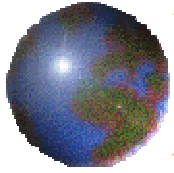
# *A new economic order*

## ■ Relationship-based business.

- Family-based investment financed the boom.
- *Guānxi* is a time-tested mechanism.
- World's largest economy for 8 of last 10 centuries, soon to be again.



President Hosni Mubarak of Egypt with Chinese Trade Minister Bo Xilai, who headed a delegation of 150 Chinese businessmen.



# *A new economic order*

## ■ Relationship-based business.

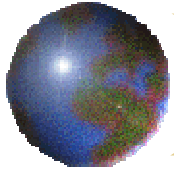
- Family-based investment financed the boom.
- *Guānxi* is a time-tested mechanism.
- World's largest economy for 8 of last 10 centuries, soon to be again.

## ■ Making inroads into South America, Africa, Middle East.

- More comfortable with Chinese relationship-based business style than Western rule-based transparency.



President Hosni Mubarak of Egypt with Chinese Trade Minister Bo Xilai, who headed a delegation of 150 Chinese businessmen.



# *A new economic order*

## ❁ Indian information technology

### ❁ Pantheism vs. secularism

- No need to maintain & manipulate nature.
- Other coping mechanisms

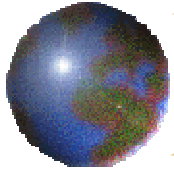
### ❁ Inner discipline

- Get control of one's mind rather than the environment.
- Modern form: intellectual discipline, academic competition.



IIT Mumbai

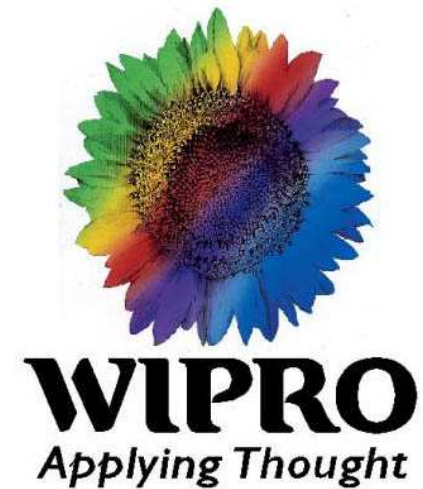




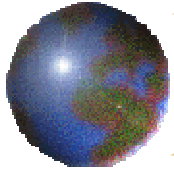
# *A new economic order*

## ■ Networking.

- Efficient way to absorb technical knowledge.







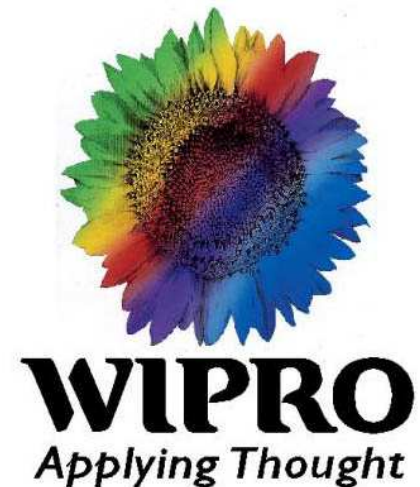
# *A new economic order*

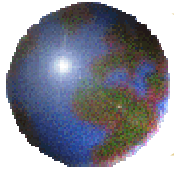
## ■ Networking.

- Efficient way to absorb technical knowledge.

## ■ A verbal culture.

- Well suited to academic discourse, information age.





# *A new economic order*

## ■ Networking.

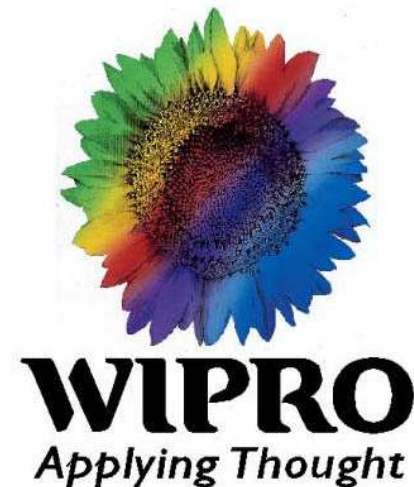
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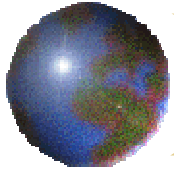
## ■ A verbal culture.

- Well suited to academic discourse, information age.

## ■ Case study: Software development.

- No need for technology, but well equipped to create it.
- Create an orderly world of the mind rather than externally.



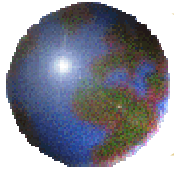


# *A new economic order*

## ■ Indians may see themselves as Westernizing/globalizing

- There is a reliance on rationality, as in the West.
- But Indians are leveraging their **own cultural traits**.



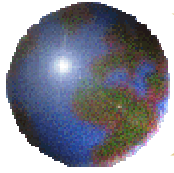


# *A new economic order*

- ✚ Western technological innovation
  - ▣ Disenchantment of nature.
    - Opened the way to manipulation of a secular world.
    - Greek rationality.



Max Weber



# *A new economic order*

## ✚ Western technological innovation

### ▣ Disenchantment of nature.

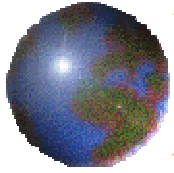
- Opened the way to manipulation of a secular world.
- Greek rationality.

### ▣ Technology as coping mechanism

- Controlling the environment rather than oneself.
- Support from family, friends less important.



Max Weber

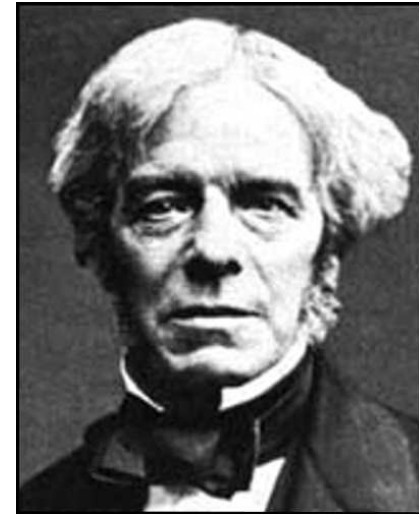


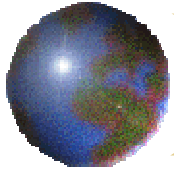
# *A new economic order*

## ■ Individualism.

- Individuals have the right to rethink everything.
- Students asked to reason from first principles.
- Do experiments, prove theorems.
- Individual expression, originality valued.

## ■ Payoff: new ideas for technological coping mechanism.





# *Cultural deglobalization*

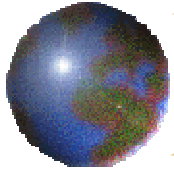
## ✚ Economic basis

- ▣ Successful countries will retain and emphasize the cultural traits that bring them success.
  - Including their behavioral norms.
  - They may **see** themselves as Westernizing.



Infosys, Electronics City,  
near Bangalore





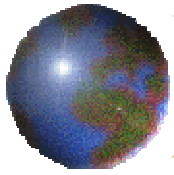
## *Roots of cultural diversity*

- ⊕ Different behavioral norms derive from different **conceptions of human nature**.
  - ▣ Rule-based cultures
    - Humans are autonomous, rational individuals.
  - ▣ Relationship-based cultures
    - Human existence is defined by its relatedness to others.
    - Family, community.

Filipino family





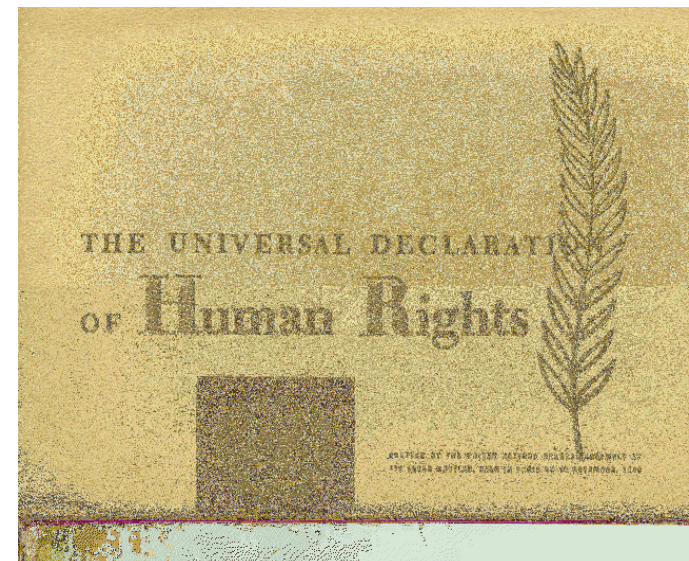


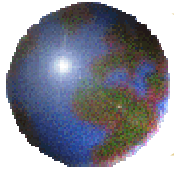
# *Roots of cultural diversity*

## ⊕ Rule-based cultures

▣ Autonomous, rational individuals must have equal status.

- Ethic of justice, equality, human rights.
- Grounded in rationality (e.g., Kant).





# *Roots of cultural diversity*

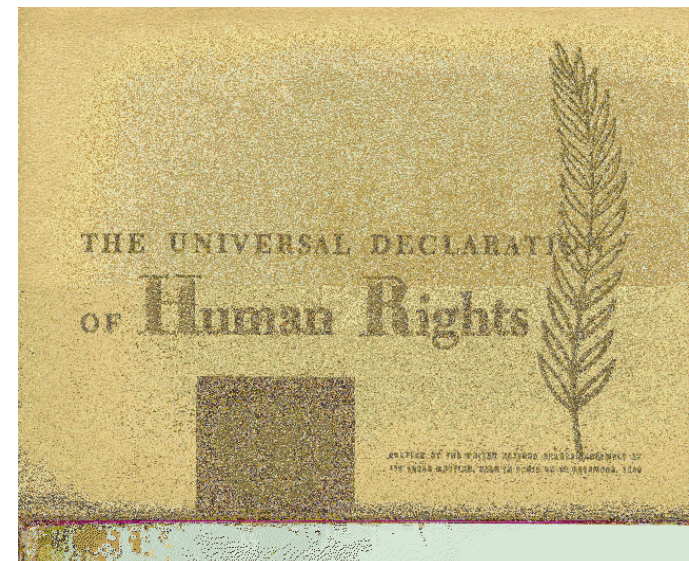
## ✿ Rule-based cultures

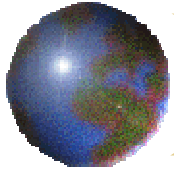
### ▣ Autonomous, rational individuals must have equal status.

- Ethic of justice, equality, human rights.
- Grounded in rationality (e.g., Kant).

### ▣ ...and equal authority

- Allegiance to persons rather than rules.
- The rules must be self-evident and therefore **universal**.

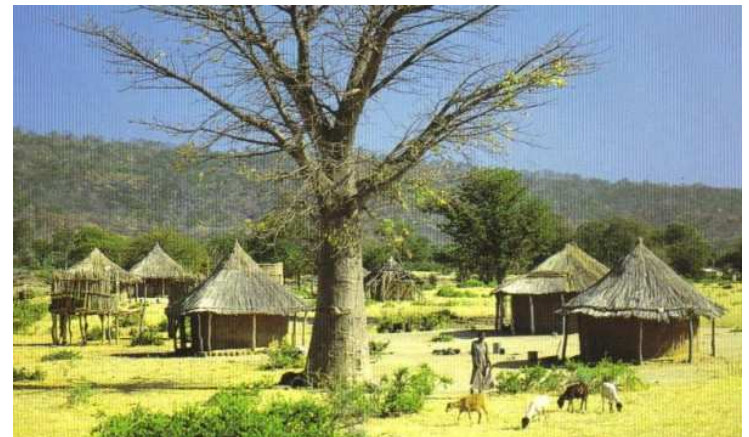




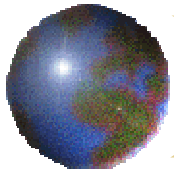
# *Roots of cultural diversity*

## ✚ Relationship-based cultures

- ▣ Persons do not exist apart from their participation in a larger unit.
  - Family, ancestors, community, even the universe as a whole.



Shona village, Zimbabwe



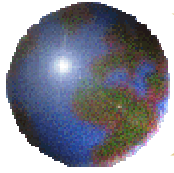
# *Roots of cultural diversity*

## ✚ Relationship-based cultures

- ▣ Persons do not exist apart from their participation in a larger unit.
  - Family, ancestors, community, even the universe as a whole.
- ▣ This leads to an ethic of care.
  - Self = the collective.
  - Justice and human rights are secondary and derivative.
  - Democracy may be inappropriate.



Shona village, Zimbabwe



# *Role of information*

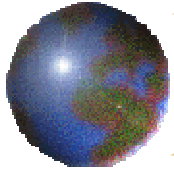
- Rule-based cultures:
  - **Low-context** communication
  - Information is explicit in the message.
- Relationship-based cultures:
  - **High-context** communication
  - Much information implicit in the social context.



Photo courtesy of Kathryn Sorrells, 1998

Edward T. Hall

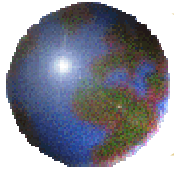




## *Role of information*

- Low-context message:
  - "I would like a pint of 5.0% premium Cobra beer."
- High-context message:
  - "Another, please."  
*(Spoken in a bar.)*



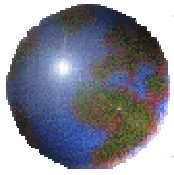


# *Role of information*

## ✚ Low-context cultures.

- ▣ Compliance ultimately based on respect for rules.
- ▣ Behavior norms are spelled out.
- ▣ People pay attention to written instructions.





# *Role of information*

- Low-context cultures.
  - Organizations run by the rules.

human-resources-policies.net

## **EMPLOYEE BENEFIT PROGRAM POLICIES**

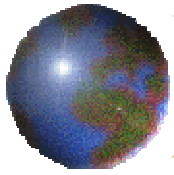
### ***Vacation Policy***

Regular Full-Time employees are eligible to receive paid vacation based on their length of service with the Company. Vacation may be scheduled at the start of the calendar year based on the following schedule.

Length of Service (Years)	Max. Annual Vacation (Days)	Accrual Rate (Days/Months)
<# year/s>	<# vacation days>	<accrual rate>
<# years> to <# years>	<# vacation days>	<accrual rate>
<# years>	<# vacation days>	<accrual rate>

All vacation must be taken in a maximum of full day increments. Employees <may or may not> carry over to the next calendar year <a maximum of one-half of their current annual vacation benefit>. Employees are encouraged to request and schedule vacation each year in January with an immediate supervisor. Supervisors will carefully monitor the use of time off and will take into consideration seniority, special skills, etc., when granting vacation.

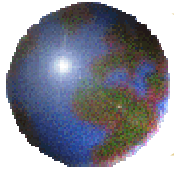




# *Role of information*

- ✚ Low-context cultures.
  - ▣ Information transmitted explicitly.
  - ▣ Rule-governed infrastructure.

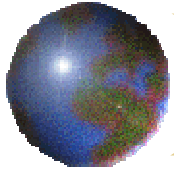




# *Role of information*

- ✚ Low-context cultures.
  - ▣ Long, detailed contracts.
    - Inflexible.
    - Enforced by legal system.





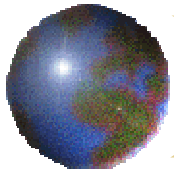
# *Role of information*

## ⊕ Low-context cultures.

### ⊞ Light supervision.

- Compliance based on guilt, fear of being caught.





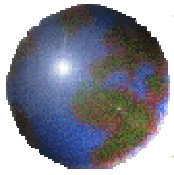
# *Role of information*

## ✚ Low-context cultures.

### ▣ Transparency possible and necessary in business.

- Impractical to work through friends, family.
- Public information necessary.





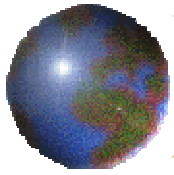
# *Role of information*

## ⊕ High-context cultures.

- ▣ Compliance based on respect for significant others.
- ▣ Behavior norms are transmitted by authority figures.





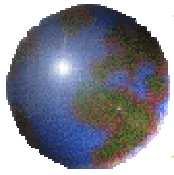


# *Role of information*

## ⊕ High-context cultures.

- ⊠ Norms tend to be implicit in the cultural context.
- ⊠ Organizations built around persons, infrastructure based on negotiation.



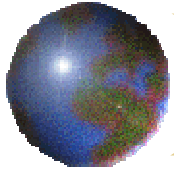


# *Role of information*

## ⊕ High-context cultures.

- Organization run by the boss.
- Particularist orientation rather than universalist.





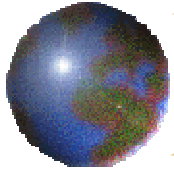
# *Role of information*

## ⊕ High-context cultures.

- Courtesy, face saving avoids disputes.
- More important to be nice than to be right.
  - Japanese example.





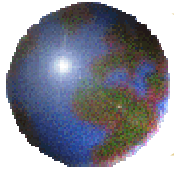


## *Role of information*

### ⊕ High-context cultures.

- ▣ Reliance on personal trust rather than the system.
- ▣ Working agreement, business relationship rather than explicit contract



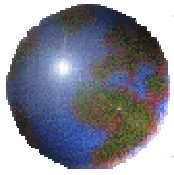


## *Role of information*

### ⊕ High-context cultures.

- ▣ Close supervision.
- ▣ Compliance based on shame, loss of face.
- ▣ Transparency difficult and less important in business.
  - Work with family and friends.

关系

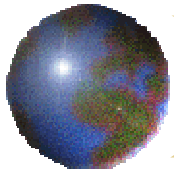


# *Information technology*

## ✚ Deglobalization.

- ▣ Cultures adapt technology to their **own purposes**
  - Including **information technology.**

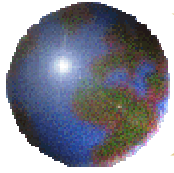




# *Information technology*

- ✚ Deglobalization.
  - ▣ Communication technology **reinforces** cultural divergence.
    - Rather than homogenizing the world.





# *Information technology*

## ✚ Deglobalization.

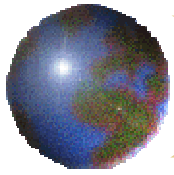
✚ Communication technology **reinforces** cultural divergence.

- Rather than homogenizing the world.

✚ In two ways:

- Market **microsegments**
- Support for **high-context** as well as **low-context** communication





# Information technology

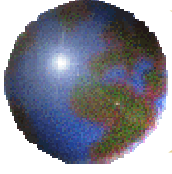
## Market microsegments

### Satellite channels.

- Easy to set up
- Can cater to every ethnic group
  - 350+ Arabic-language channels







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# *Information technology*

## ■ Culturally-specific websites.

- e.g., 275+ Google sites

Google<sup>TM</sup>  
hrvatski

Google<sup>TM</sup>  
ಕನ್ನಡ

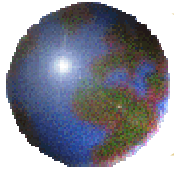
Google<sup>TM</sup>  
谷歌

Google<sup>TM</sup>  
தமிழ்

Google<sup>TM</sup>  
Telugu

Google<sup>TM</sup>  
ಕೂಗಲ್

Google<sup>TM</sup>  
हिन्दी



# *Information technology*

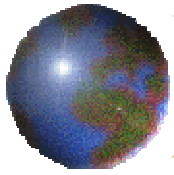
- Support for high-context communication

- Connectivity

- Close supervision





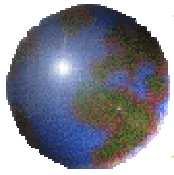


# *Information technology*

## ■ Mobile phones.

- Constant contact with associates.
  - After Finland, took off in Asia.
- Close and constant supervision
  - By parents.
  - By employers.



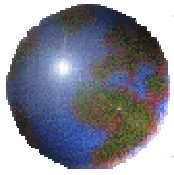


# *Information technology*

## ■ Text messaging, etc.

- Smart phones
- Instant messaging
- Email





# *Information technology*

## ■ Networking websites.

*Low context*

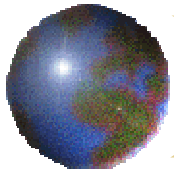


*High context*

orkut<sup>beta</sup>

**Connect** with friends and family using scraps and instant messaging  
**Discover** new people through friends of friends and communities

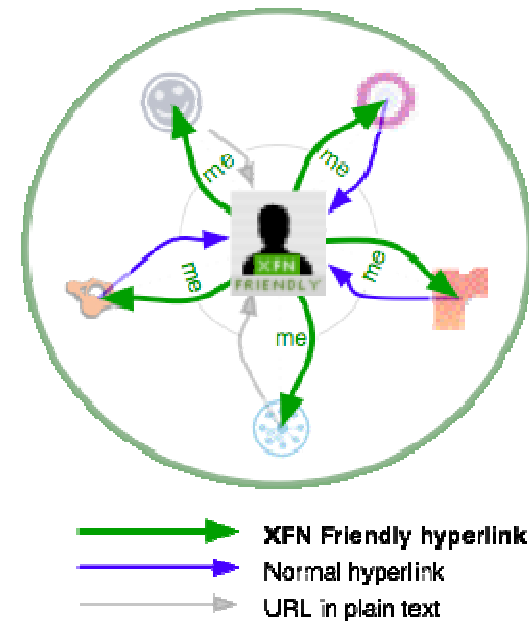
Wildly popular in Brazil.

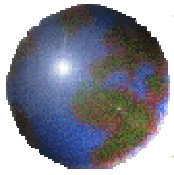


# *Information technology*

## ■ Networking software & services.

- XHTML Friends Network
- Ryze, XING, LinkedIn (business)
- Digg, StumbleUpon, reddit (social bookmarking)
- Virtual worlds (populated by avatars)



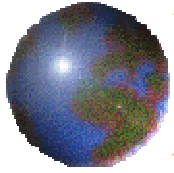


# Stability

High-context approach is more stable.

- Asian financial crisis.
  - China, Taiwan escaped it.
  - Family-based finance.
- Current financial crisis.

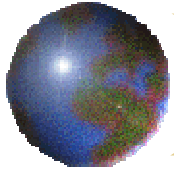




# *Conclusion*

- ✿ Cultural deglobalization.
  - Powered by **cultural comparative advantage**.
  - Enabled by **information technology**.
  - With the added benefit of greater **stability**.





# *The future of information?*

- ❖ Less global **intellectual networking**
  - ❖ Enough to exchange ideas, but not to stifle each culture's intellectual development.

