

IT and Impact on Government Control Over Society

Module 8

Cynthia L. Tomovic, Ph.D., Editor

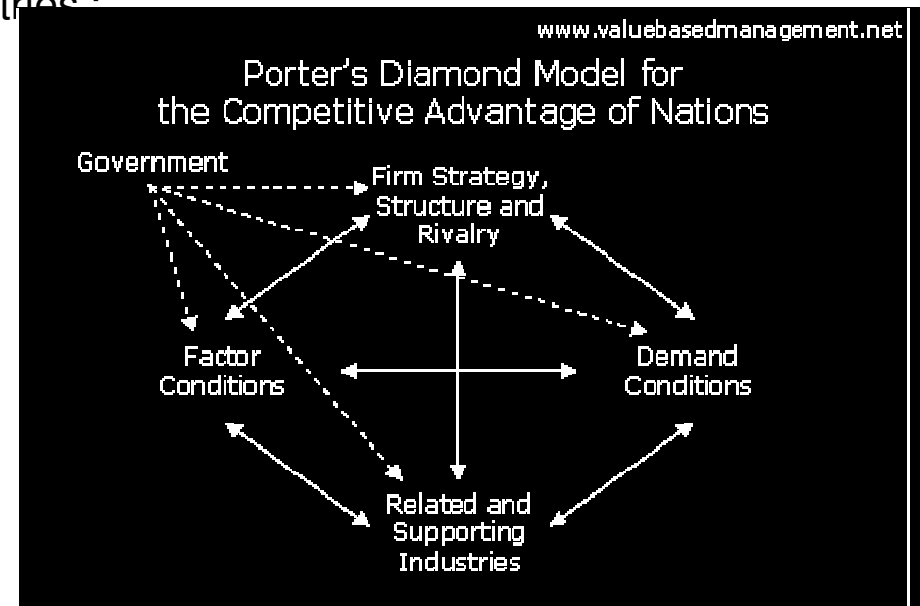
**Jon Kochert, Alyssa Rodriguez, Jason Rey, John Weinrich,
Julia Miller, Sarah Faghihi, Mike Hopkins, Marcus Dean
Research Assistants**

Purdue University

**Discovery Park Center for Advanced Manufacturing
The Product Lifecycle Management Center of Excellence**

Competitive Information

- Competitive Information
 - Gives an advantage over other countries*
 - Market state
 - Flow of resources *
 - Infrastructures
- What gives a competitive advantage?
 - Firm strategy, structure, & rivalry
 - Demand conditions
 - Related and Supporting industry
 - Factor Conditions
- The effects of information flow
 - Knowledge of actions
 - Governmental creation of effective policies



*Porter, M. (August 23, 2006). *Diamond Model*. Retrieved August 27, 2006, from http://www.valuebasedmanagement.net/methods_porter_diamond_model.html

Political

- Internet allows an insight into other countries, entities, & cultures information at the tip of the users' fingertips*
 - Pros
 - Instantaneous access of information can lead to global equilibrium
 - Levels the global playing field
 - Few restrictions
 - Access to websites on any company or entity that exists
 - Limited censorship
 - Unlimited knowledge
 - Cons
 - Information Warfare
 - Anyone can have access to public information
 - Few restrictions
 - Money can tear down information barriers
 - Exploitation
 - Knowledge in the wrong hands



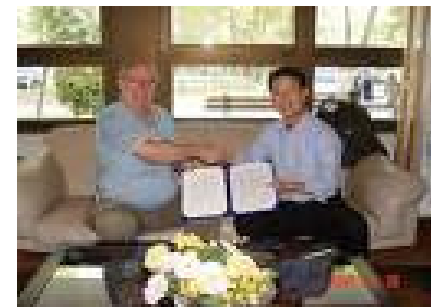
*Army War College (1998, February). *How Did We Get Here?*. Retrieved August 23, 2006 from Web site: <http://www.au.af.mil.au/awc/awcgate/iw-army/mod1.htm>

Market



- Global Markets
 - Internet has revolutionized international sales
 - Companies have access to supplies with real time updates
 - Language barriers don't need to exist in cyberspace
 - Electronic databases ensures efficiency
- Exports and Imports*
 - Countries have access to supplies foreign and domestic
 - Effects global GDP and currency values
- Investments & business ventures
 - Market value determines buying potential
 - Business transactions globally
 - Real time inventory

*Stang, Stephanie (2005, August 31). *Lumber Costs expected to rise, thanks to Katrina*. Retrieved August 23, 2006 from, Web site: http://www.wndu.com/news/082005/news_444466.php?



Economics

- Currency Values
 - Low export to import ratio effects value of currency
 - i.e. dollar value maintains poor international value
 - Buying potential is lowered
- National dependency*
 - Less dependent on foreign products
 - Higher output in agriculture for exportation
- Global Economics~
 - Global B2B transactions effect employment and inflation rate
 - Argentina: (12% est: 2005) - hyperinflation
 - U.S. (3.4% inflation rate)
 - International markets directly effect other markets
 - Real time statistics



* Albuquerque, R., Vega, C. (2006, March). *Asymmetric Information in the Stock Market: Economic News and Co-movement*. Retrieved August 23, 2006 from, Web site: <http://www.ideas.repec.org/p/cpr/ceprdp/5598.html>

~ Alwesh, Basma (2001, April 17). *CSFdirect-Union Sharpens Online Brokerage*. Retrieved August 23, 2006 from, Web site: <http://www.saudia-online.com/press/press23.shtml>

What does this Access do?

- The instantaneous access to information interrelates companies, entities and governments on an international level.*
 - The globalization of B2B transactions requires knowledge of international customs
 - Anyone can access information at any time to determine a decision;
 - Business
 - Education
 - Government
 - Requires that any entity can not continue to do actions outside of the global internet environment. The business world has entered a new stage of its life and there is no looking back

* (2005, January 5). *The Internet and Human Rights: An Overview*. Retrieved August 23, 2006 from Center for Democracy & Technology Web site: <http://www.cdt.org/international/000105humanrights.shtml>

Why/How Governments Control Information?

- Patents
- Barriers to trade
- Payment infrastructure
- Types of products available

Patents

- Around one hundred and thirty countries abide by the PCT (Patent Cooperation Treaty).
- Although the countries adhere by the same treaty, they don't all have the same types and terms of patents
- United States has three types of patents: design (14yrs), plant (17yrs), and utility (20yrs).
- Australia has two types of patents, one is considered standard patent (20yrs) where the other is an innovation patent (8yrs).

Patent Cont.

- Ireland has patents upto 20 yrs, but they also have set up what they call a “short-term patent (10yrs).
- Jamaica has established it so that their patents are effective up to fourteen years. Also has an extended program for special circumstances (7yrs).
- UK, Canada, Hungary, and Belize have twenty year patents with different qualifications.

The protection of
Intellectual Property
Rights (IPR) is a main
issue concerning today's
trade relationships
between governments.

Example 1: China and Microsoft

- In a PBS broadcast this year, the concern of pirated material in China was a major issue discussed during President Hu's visit to the U.S.
- Microsoft loses an estimated 90% of sales in China to pirated material
- In response, the president of China said that they are addressing this problem by installing Microsoft software into computers as they are being built, thereby eliminating the need for the consumer to buy software

Source: www.pbs.org

Example 2: CAFTA-DR

- IPR's were given specific consideration in a recent agreement between CAFTA and the Dominican Republic
- These countries will improve data protection regimes and impose harsher penalties for businesses and countries that do not comply
- The governments have committed to setting an example by only using legitimate software
- Tough penalties are in place for those pirating and counterfeiting material

Source: www.export.gov/fta/

Example 3: New Orleans Saints and Olympia Deportiva

- The New Orleans Saints made an agreement with Honduran club Olympia Deportiva to show and sell licensed material of the NFL New Orleans Saints
- To protect these trademark logos, only vendors who are properly complying with licensing laws may sell the merchandise; they have set up a “bad faith” provision to protect those complying from being penalized with those who are not
- Games will be shown through encrypted satellite broadcasts to protect the ownership of the content

Source: www.export.gov/fta/

Payment Infrastructure

- Cell Phone Fund Deliveries
 - Cell Phone carriers in the Philippines have developed a service that delivers funds to customers through text messaging called Smart Padala
 - This service is based on a system that lets users transfer their balances onto their pre-paid accounts on their cell phones
 - Smart Padala is primarily used to pay telecom bills and make purchases from merchants.

Single European Payment Area

- SEPA is an idea which would create one automated clearing house network that would replace the 25 national networks that already exist in Europe
- 12 European nations have made the Euro their form of currency, however all 12 of them have their own payment infrastructures.
- SEPA would eliminate the need to perform such a tedious task, therefore making the transactions easier and a lot more common.

Types of Products Available

- Governments control the flow of technology for several reasons. Those reasons range from national security to public safety and economic issues.

National Security

- The sale and/or use of some technologies may pose a threat to national security.
- Example: nuclear technology

Public Safety

- Some technologies may be found to be unsafe by some governments.
- Example: products that emit unsafe levels of radiation

Economic Issues

- Governments may control, or even prohibit, the sale of some products from other countries in order to promote growth in domestic firms or to further its own interests.
- Example: higher tariffs on imports

Acknowledgments

The author wishes to acknowledge the support from the Society for Manufacturing Engineers - Education Foundation, SME-EF Grant #5004 for “Curriculum Modules in Product Lifecycle Management.”



EDUCATION
FOUNDATION