

Singapore Unlimited: Building the National Information Infrastructure

January 26, 2006

Team 2:

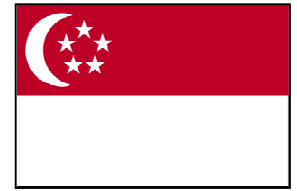
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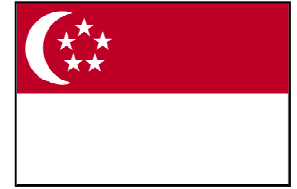
What is NII?



“What is the Singapore NII effort? The NII is in its early evolution; with little agreement of what it is and much less how it should be built. Possibly the only agreement is that it should, in a vendor neutral manner, bring about electronic services to the masses.”

- Michael Yap

What is NII?



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- The NII is a nationwide infrastructure linking to the international infrastructure for the movement of electronic information.
 - NII defined around the three core components, *conduit, content, and compute*.
 - NII was different from other nationwide infrastructure
 - No precedent
 - Different worker competencies
 - Different oversight

Prime Ministers Lee Kuan Yew and Goh Chok Tong



Lee Kuan Yew

- Fostered national unity
- Leveraged geographic location
- Developed transportation infrastructure to attract international business

Goh Chok Tong

- *The Next Lap*
- Development of industrial parks in China, India, and others
- Growth of the region to enhance Singapore's economic space and growth

Porter's Diamond: Singapore and NII



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- I. Factor Conditions (Specialized):
 - Government invests in infrastructure
 - Geographic Location
 - II. Demand conditions:
 - Universities are early adopters
 - Recruited MNCs
 - The whole society involved in the networking effort

Porter's Diamond: Singapore and NII



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- III. Related and Supporting Industries:
 - “Everyone” needs move information
 - Geographic location, access to Asia
 - Packaged goods/transportation
 - Software R&D (Sector clusters)
 - Electronics (Sector clusters)
 - IV. Firm Strategy, Structure & Rivalry
 - **Structure:** Statutory board, all stake holders
 - Different groups, different interests. Large amount of government involvement
 - **Strategy:** provide high value-added infrastructure
 - **Rivalry:** Companies compete to build the NII, improving the quality of NII

Porter's Diamond: Singapore and NII



➤ V. Government

- Alliance with other local governments, leveraging Singapore's expertise
- Investing in efficient infrastructure systems
- Privatization of companies (STel in 1993)
- Command and control: must stay ahead of technology curve, yet also create demand

Success of the NII



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- The NII was a success
 - GDP per capita increased from \$14,210 to \$29,700 from 1991 to 2005.
 - SingTel
 - Largest mobile network in the Asia pacific outside of China
 - 71 million customers
 - Factors contributing to success
 - Government investment
 - Collaboration between government and industry
 - Priority of IT development

Singapore's Next Step



- Leverage location as a site for regional headquarters for multinational corporations.
- Develop infrastructure for other industries that can be used of by other multinational corporations.
 - Semiconductor and computer industries
- Biotechnology is too volatile and outside the area of Singapore's expertise.
 - Need biotech. savvy venture capitalists, local academic research, and clinical trial facilities.