

The NL Ocean Technology Cluster... Can government make it so?

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University – nucleus of the cluster



- Universities & government R&D labs are essential to cluster development
- Catalyst for economic growth

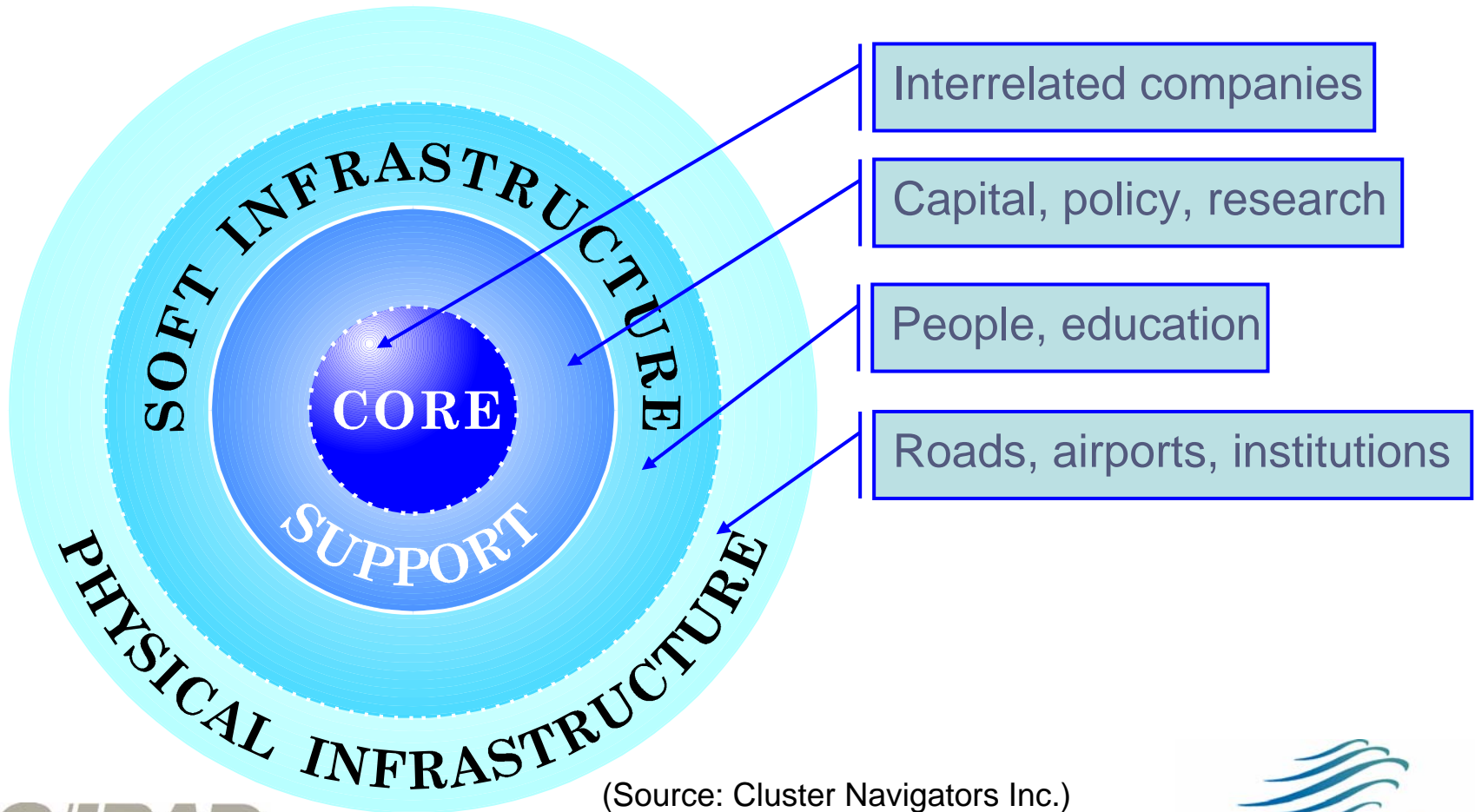
The goal – stimulate sustained, long-term economic wealth & prosperity

This is nothing new

- Many clusters worldwide – first noted in 1890
- World-leading concentrations of activity
- Here, we used to say “Centre of Excellence”
- Labels change - but the idea is not a fad
- Ocean activities - our “natural” inclination

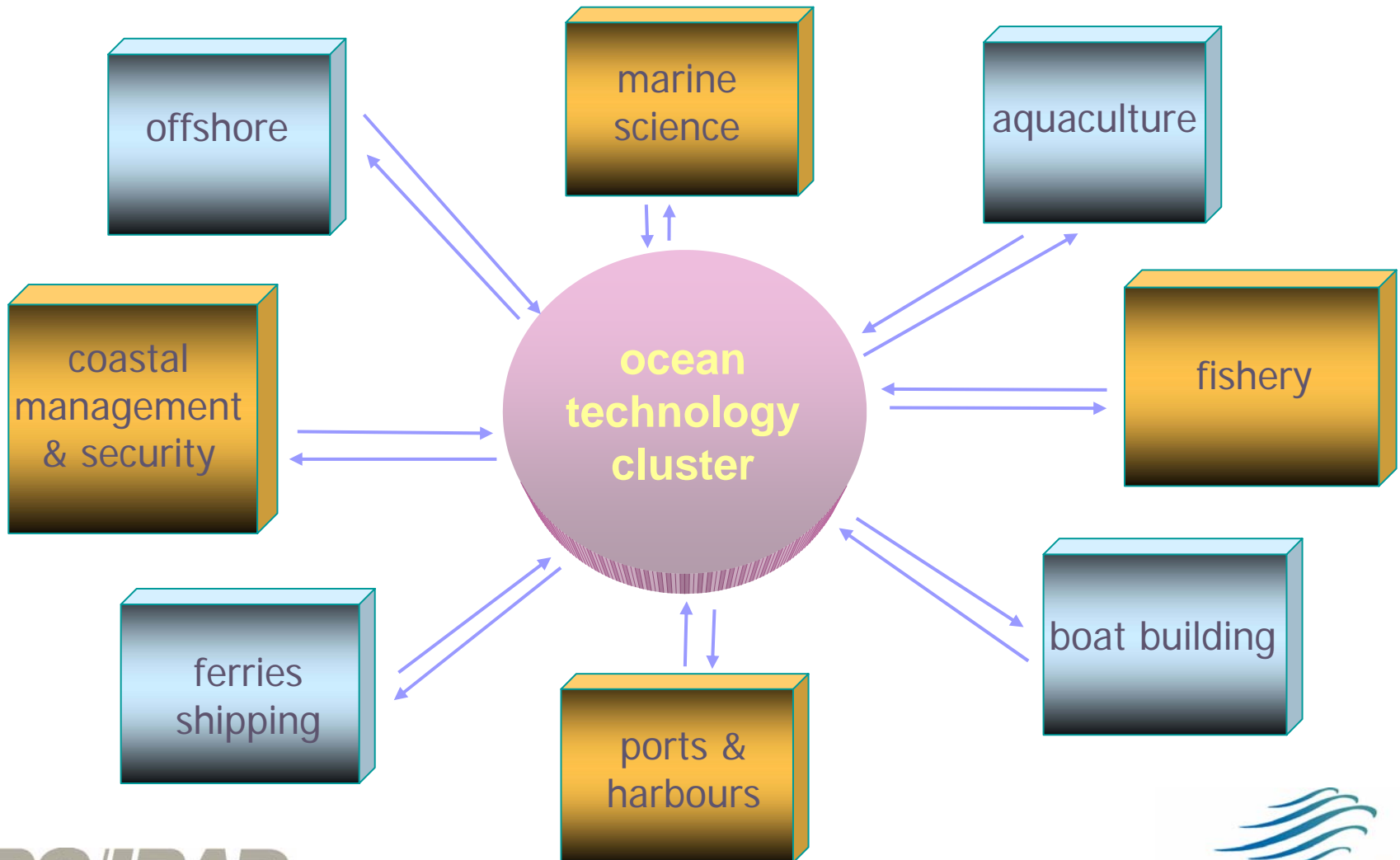
What makes a cluster?

A geographic concentration of interdependent firms with common needs for talent, technology, & infrastructure



(Source: Cluster Navigators Inc.)

Urban - rural connection



NL compared to Finland

NL ocean technology cluster

- Light industry
- Sub-contractors
- Niche products
- Minimal networking
- Competition avoidance
- Perception of weak domestic market

Finnish maritime cluster

- Heavy industry
- Core product companies
- Integrated products
- Contractor network
- Internal competition
- Domestic market strength

(Source: TEKES, 2003)

From the Finnish comparison

- We need a stronger business core
 - More companies & more people
 - Vertical & horizontal relationships
 - Commercial opportunities
- Government cannot make a business core
 - But can set the environment
 - Can exhibit & support desirable behaviors

What we do have

- Support infrastructure
 - Research facilities & education institutions
 - Talented people
 - Federal – provincial – municipal interest
- Successful companies
- Community optimism



Current clustering activities

- Placentia Bay marine electronic highway & seabed mapping proposal – CCMC
- Branding & promotion – City of St. John's
- Ocean technology research park – Board of Trade
- Incubator consortium – MUN-NRC
- An abundance of analysis – NRC-IC-ACOA-Provincial Government

Government – improve the environment

- Education & research
 - People with ideas commercialize & make wealth
 - Education produces qualified people
 - Research produces ideas
- Infrastructure & taxes
 - Good infrastructure attracts people & business
 - Competitive taxes attract people & business

Government – lead by example

*If we won't buy it, why would the world?
or, if the world buys it, why won't we?*

- Governments buy a lot
- Maritime nation – maritime province – maritime city
- Support our own activities
- Solve our own problems
- Export success built on domestic strength

Set the example...

There is a domestic market

Ocean-related primary industries in NL – fishing, offshore oil, marine science, coastal security, transportation, harbours, aquaculture...

- Annual expenditures: 4,915 (M\$); Installed capital: 13,760 (M\$)
- 30.6% of provincial GDP (43% removing health, education)
- Secondary sector provides little to primary industries (1% GDP)
- If NL firms could capture 50% of technology supply for operations & 30% technology supply for capital maintenance annually, then secondary industries would be worth \$648.5 Million
- Employment increases to 8300 & yields an ocean technology cluster at 4% of GDP based on current provincial demand alone!
- Global market – from 4% to 8% GDP – some 16,000 employees!

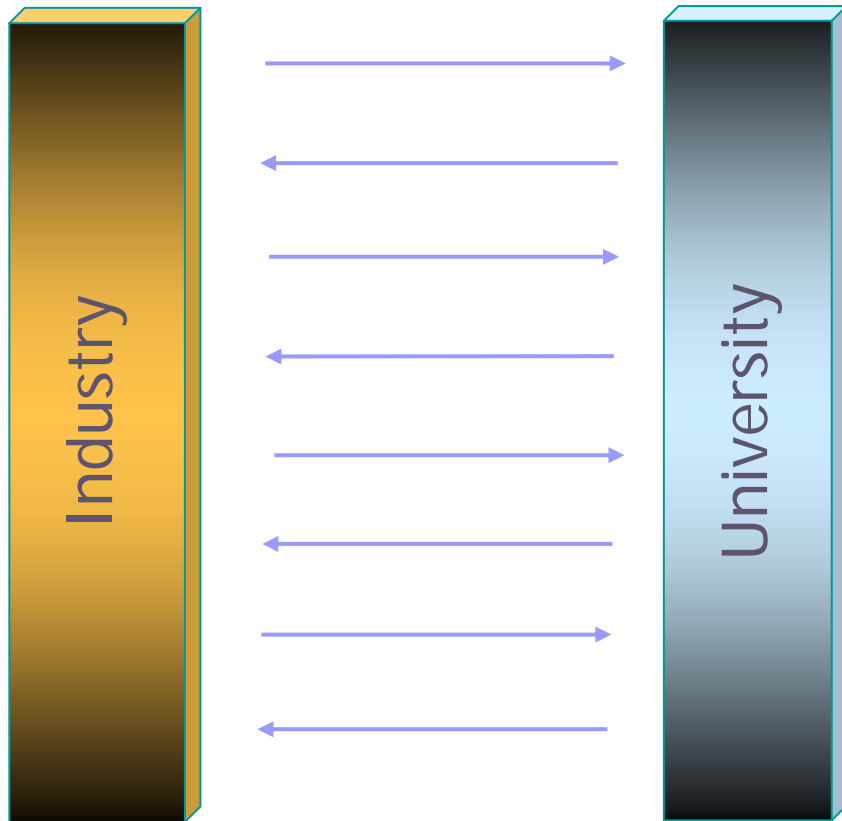
A substantial market opportunity literally on our doorstep...

University – part of the environment

- Education & research are key supports
 - Feedstock for a cluster
- Concentrate on product quality
 - Students & ideas
- More research
 - Where this cluster needs extra effort
- Be permeable
 - More porous interaction with the community
 - Less overhead & control

A permeable university

Everyone deals with the world around them

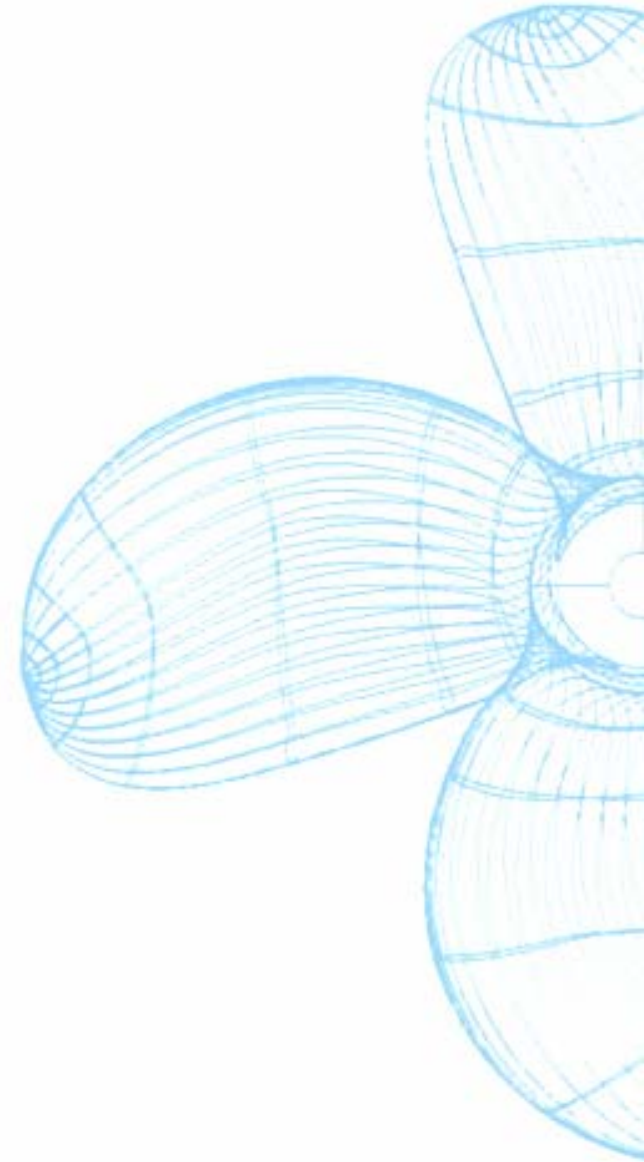


- ✓ Unrestricted interactions
- ✓ Open flow of ideas
- ✓ Efficient technology transfer
- ✓ Incentives to individuals
- ✓ Encourage exchange

Building competitive advantage...

“In a world of global competition, sources of competitive advantage are becoming increasingly localized and true competitive advantage is found within our communities.”

Michael Porter, Harvard University



Thank You!

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