

Creating Wealth: Using Knowledge and Technology

A 25-year Case Study

**Jim Dangerfield
Forintek Canada Corp.**

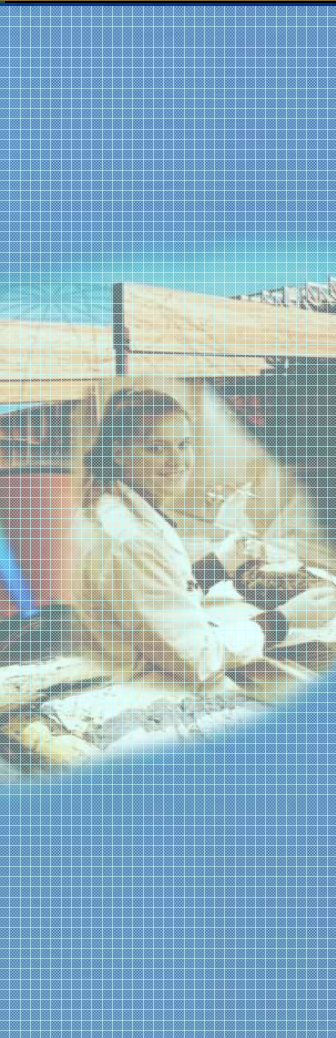
IUFRO

Portland, Oregon – May 2005

Our Key Objectives

Support members in their effort to...

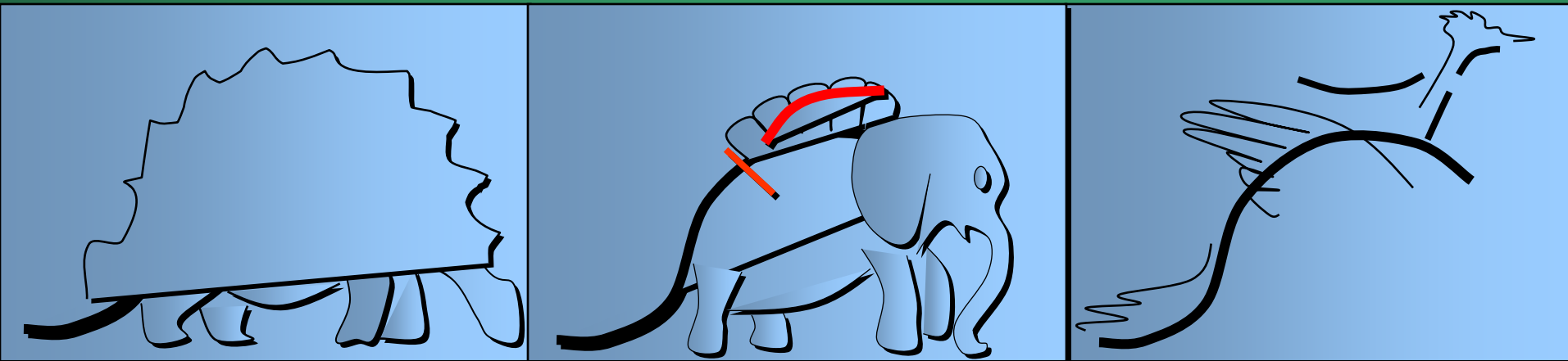
- Reduce production costs
- Improve efficiency and product quality
- Add value to products
- Expand market share



Forintek – Background

- Established in 1979 as a private, non-profit research corporation as Canada's National Wood Products Institute
- Initially, a Canadian Forest Service research program
- Government services privatized in 1979
- Partnership of governments (federal and provincial) and industry
- Focus: lumber and wood products

The Curve of Change...



A: Do Nothing

B: Stop & Fix

C: Launch

Member Needs and Priorities

Industry

- Low Cost Fibre
- Low Cost Producer
- Market Access

Federal Government

- Market Access
- Sector Competitiveness (Jobs)
- Environmental Issues

Provinces

- Maximize Value of the Resource (Rent)
- Job Creation
- Environmental Issues

Key Challenges

- Finding common ground amongst partners
- Continual demands by members to demonstrate significant “return on investment”
- Encouraging investment and an R&D culture in an industry that is very cyclic and largely driven by a commodity mentality

Guiding Principles

- **Members determine where solutions are needed**
- **Members and Forintek co-produce solutions**
- **Forintek finds solutions as well as creating them**

Forintek—Working with Others

- **Universities**
- **Research Organizations**
- **International Groups**
- **Non-Research Community**

Things That Matter

- **Relevance**
- **Timeliness**
- **Excellence**

Setting Forintek's Direction

- National Board of Directors
- National Research Program Committee
 - ▣ Strategic Direction (*what*)
 - ▣ Priorities (*why*)
- National Technical Advisory Committees
 - ▣ Project selection (*when*)
 - ▣ Monitor Progress
- Project Liaison
 - ▣ Assistance
 - ▣ Demonstration

Resolution of the Board of Directors

Be it Resolved That:

...the National Research Program be refocused on the members' customers.

...Forintek actively tap into a variety of information sources... to enable the identification of key attributes in wood products and systems to meet market demand.

...Forintek will use this new focus and up-to-date market information to guide research to optimize the use of wood.

Significant Change

- **Not the same organization it was in 1979**
- **Member-directed strategic reviews provide impetus for ongoing transformation**
- **In tune with member needs: Value Chain focus**
- **Market driven: active and significant participation by members in research planning and solution adoption**
- **Good balance between applied research and providing practical operational solutions**

Significant Change

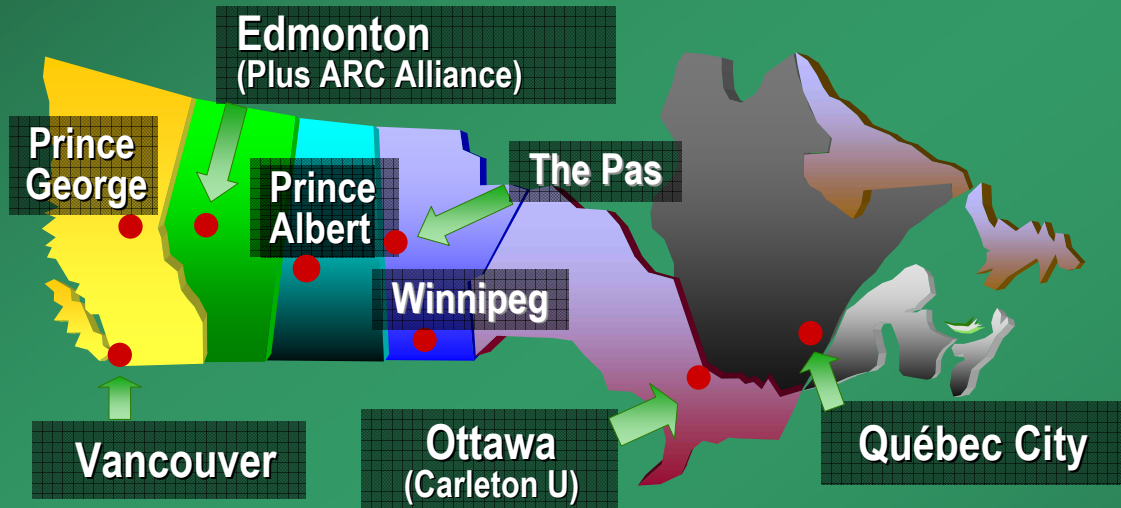
- **New capabilities added (e.g., market economics, value-added)**
- **Increased connections with universities and other research organizations**
- **Delivering to the mills: Technology Advisors located in Regions**
- **Established Forintek/FERIC Alliance**

Forintek Partnership

“A National Organization Headquartered in Vancouver”

**Shared Priorities, Shared Risks,
Shared Benefits, and Shared Costs**

- **Industry – 200+ Companies**
- **Provincial Governments**



- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Québec
- New Brunswick
- Nova Scotia
- Newfoundland & Labrador

- **Federal Government**

“Research for the Wood Products Industry”

Revenue—2004/2005

	Partnership	Contract Services
Industry	7,000,000	4,000,000
Provincial Government	2,920,000	2,900,000
Federal Government	6,200,000	4,250,000
Licensing	600,000	-
	16,720,000	11,100,000

Technical Support To Codes in China

How did Canadian lumber
get code
acceptance in China?

Partners

Canada:

Canadian Forest Service
Council of Forest Industries
Canadian Mortgage and Housing
Corporation
Department of Foreign Affairs and
International Trade
National Research Council
Canadian Wood Council
National Lumber Grades Authority
Canadian Plywood Association
Quebec Wood Export Bureau
BC Provincial Government

USA:

American Forest and Paper Association
APA-The Engineered Wood Association



WINNER

Canada's
Energy Efficiency
AWARDS

2005



Winner: Veneer Drying Techniques



Forintek Canada Corp. Research Team

“Research for the Wood Products Industry”



Forintek – Third Party Evaluation

Comments from PMN Evaluation 2004

- *“Forintek’s technical support to building codes and regulations contribute to market access”*
- *“Forintek contributed directly to the achievement of government public policy objectives”*
- *“Forintek continues to play a vital role in the technology infrastructure supporting innovation in the Canadian forest sector”*

Forintek – Third Party Evaluation

Comments from PMN Evaluation 2004

- Industry members verify that Forintek research and services have added several hundred million dollars to their bottom lines over the past decade (company-specific report cards)
- OSB research contributed to reduction in wood cost in manufacturing by 14% and variable cost by 16% between 1997 and 2003 (Composite TAC)

Forintek – Third Party Evaluation

Comments from PMN Evaluation 2004

“Interviewees noted that in almost all cases, Forintek works collaboratively with other complementary programs to provide a larger critical mass and distribution capacity”

Forintek – Third Party Evaluation

- ***“Forintek is an exemplary ‘alternative service delivery mechanism’ serving taxpayers more cheaply and effectively”***
(Clerk of Privy Council 1997)
- ***“Program well managed and budget well invested”***
(Audit of Value-added Research 2001)
- ***“Forintek’s design and delivery serves as a model for Technological innovation in the 21ST Century”***
(Audit of Federal Investment 2004)

OUR WEBSITE ADDRESS :



Thank You!