

Innovation and R & D in the Caribbean :

A Model for our Economy in the 21st Century

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Competitiveness

- *Competitiveness is the degree to which, under open market conditions, a country can produce goods and services that meet the test of foreign competition, while simultaneously maintaining and responding to domestic real income.*

Cross Country Comparison of Competitiveness Indicators

Rank out of 104 countries	Index		
	Growth	Technology	Public Institutions
USA	2	1	21
Finland	1	3	3
Chile	22	32	20
Costa Rica	50	55	47
Jamaica	65	49	69
Panama	58	53	60
Trinidad & Tobago	51	54	64
Honduras	97	93	100
Dominican Republic	72	60	71
Botswana	45	64	39

Source: World Economic Forum: *The Global Competitiveness Report 2004 - 2005*

Key Factors in Competitiveness Strategies

- An active public-private sector partnership is a necessary and sufficient condition for an efficient and practical competitiveness strategy in our developing economies.
- Successful strategies will fuel future national and regional competitiveness, economic growth, raising per capita incomes, more internal consumption of goods and services and more employment. Thus a more competitive economy will generate a “win win” situation for both government and the private sector.

Quote

“It is not the big companies that eat the small;

It’s the fast that eat the slow”

Wall Street Journal

Quote

*“So oft in theologic wars,
The disputants, I ween,
Rail on in utter ignorance
Of what each others mean
And prate about an Elephant
Not one of them has seen !”*

Creativity

- *Creativity can be defined as the conceptualization of solutions that are expressed as ideas that are unique and new in application to industrial, educational and social and cultural challenges.*

Innovation

- *Innovation is the implementation and transformation of those ideas into valuable or profitable applications. In any environment, technological innovation is relative to that which is in use and often dependent on availability and application. Organisations have many reasons to focus on creativity and innovation.*

Why Focus on Creativity & Innovation

▪ Growth	▪ Competition
▪ New Products & Services	▪ Technology
▪ Projects	▪ Information Systems
▪ Quality	▪ Knowledge Management
▪ Change Management	▪ Intellectual Capital
▪ Re-engineering	▪ Empowerment
▪ Downsizing	▪ Diversity
▪ Productivity	▪ Government Regulations
▪ Globalization	▪ Customer Needs

Types of Innovation

- *Product Innovation*
- *Process Innovation*
- *Management Innovation*
- *Marketing Innovation*

To Innovate Successfully

- The Entrepreneurial / Inventive Spirit
- The Willingness to Commit Resources
- The Methods to do it
- The Organization

Key Steps In Becoming An Innovative Organization

Educate Workforce On Creativity Tools & Techniques

Establish Managerial Processes to Convert Ideas Into Innovations & Measure Results

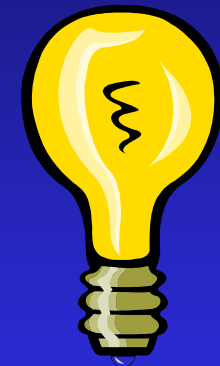
Leadership

Establish innovation as a priority

- Provide strategic direction
- Allocate resources

Establish an Organizational Structure that Promotes Collaboration

Recognize Creative Behaviour & Reward Innovative Results



Innovation

Impact of Innovation Programs

Parameter	%
Overall Revenue Growth	78
Customer Satisfaction	76
Growth in Revenue from New Products/Services	74
Increased Productivity	71
Earnings/Profit Margins	68
Recruitment and Retention	34
Market Capitalization	17

R&D Defined

- R&D is defined as comprising ***“creative work undertaken on a systematic basis in order to increase the stock of knowledge And the use of this knowledge to devise new applications”***.

Technology Markets: How They Work

LEADING THE CHANGE

- Create new technologies and products
- Create new markets
- Raise Industry Standards
- Redefine customer needs

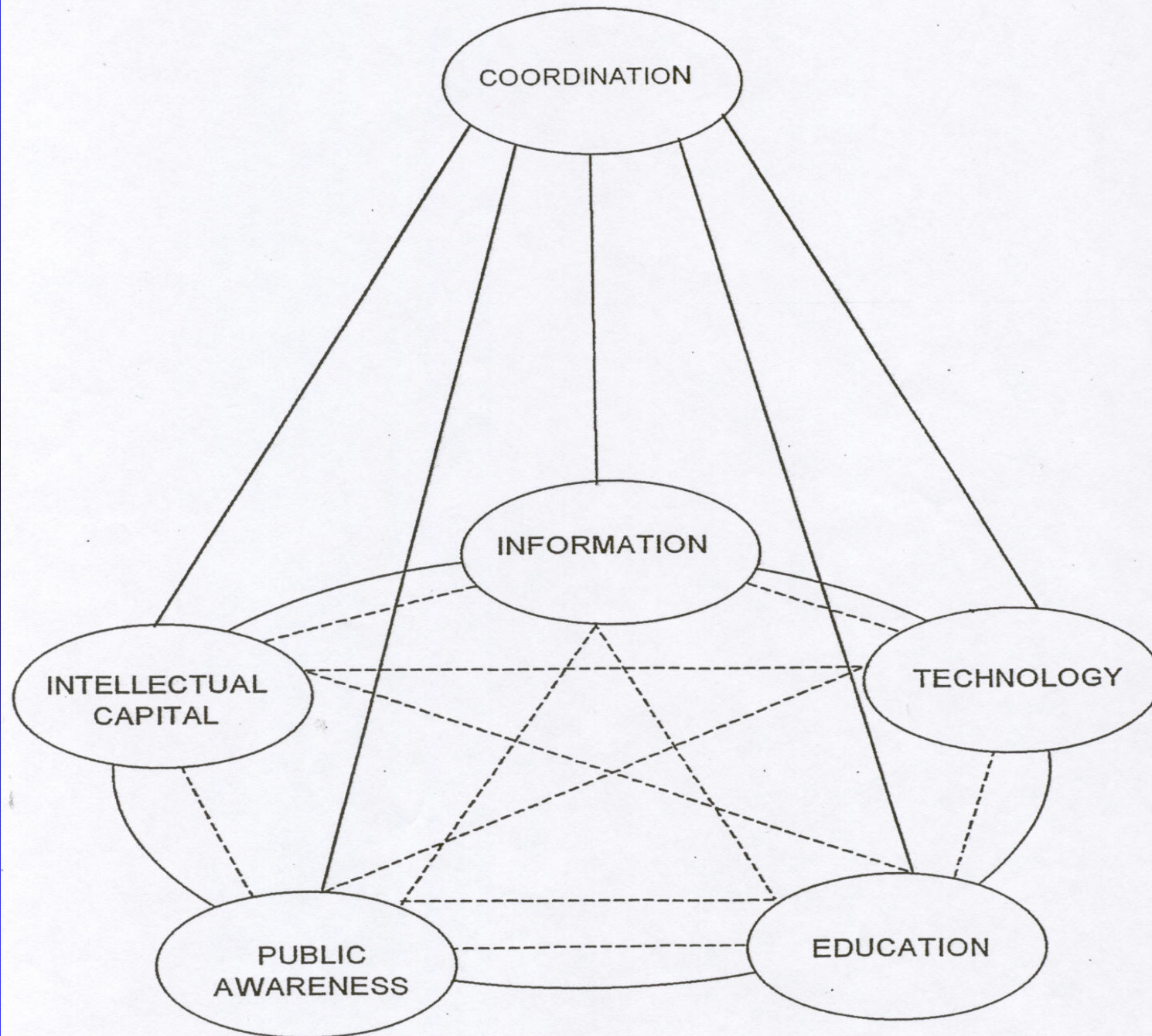
ANTICIPATING THE CHANGE

- Change in raw material costs
- Demand change
- Emergence of New Technology

RESPONDING TO THE CHANGE

- Unexpected demand change
- Competition move
- Changes in Regulations

Capacity Building for Innovation



Key Elements of a Caribbean Model

- ***Strengthening the R&D Institutional Framework***
- ***Strengthen links between firms and the Public Research Infrastructure***
- ***Building up networking capacities among firms***

Key Elements of a Caribbean Model

- *Building up the internal absorptive and innovative capacities of firms*
- *Encourage trans regional cooperation*
- *Stepping up economic and technological intelligence*
- *Defining Government's role in an Entrepreneurial Economy*

Concluding Remarks

- ***Establishing National Research/Commercialization Focal Points***
- ***Developing and introducing various financial assistance schemes***
- ***Establish Innovators' Clubs (at the school level), Innovator Assistance Centres, a National Technology Databank***
- ***Establishing an Incubator Support Programme***
- ***Develop schemes to specifically foster Technology-Brokering Cycles***

While our natural resources may be adequate for keeping us afloat in the league of progressive developing countries, these resources will not be enough to win a top position among them

Innovation, Research and Development, is required of us NOW !

We owe it to our future generations !

Thank You

for your Attention