



Developmental Entrepreneurship

MAS.666 / 15.971

Intro & Overview

12 September 2003

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Doing Our Part in a Global Development Movement

- Global challenge never been clearer or more broadly known
- Development disparities *within* and *between* nations and peoples
- Understanding about what works growing
- Politically ripe – consider Mexico's Fox, Ghana's Kufuor, Russia's Putin

Dream Scenario:

Global Health, Wealth, & Happiness

- Ailments diagnosed & cured
- Infrastructure built & clean
- Industry with minimized externalities
- Peace, Security, & Freedom
- Competent & Non-Corrupt Civil Service
- Choice maximized

DE Emerging theme at MIT

- Third year of seminar
- Lots of past case examples to build on
 - <http://web.media.mit.edu/~jpbonsen/DE-2002Fall.htm>

Connecting Development & Entrepreneurship

- MIT \$50K Entrepreneurship
Competition: *\$1K Warmup & Alum e.g's*
- DyD Workshop
- Other E-Center classes: GLab
- SEID
- Alumni Company Role Models...
- Our DE Seminar

Alumni Company Role Models

Africa Online

<http://www.africaonline.com/>

Evergreen Solar

<http://www.evergreensolar.com/>

Water Pumping in Tanzania

This water pumping system provided the first water supply for the main slaughterhouse in Dar es Salaam, Tanzania. WorldWater Corporation (www.worldwater.com) designed and installed this AquaSafe™ system, as well as others in Africa and Southeast Asia



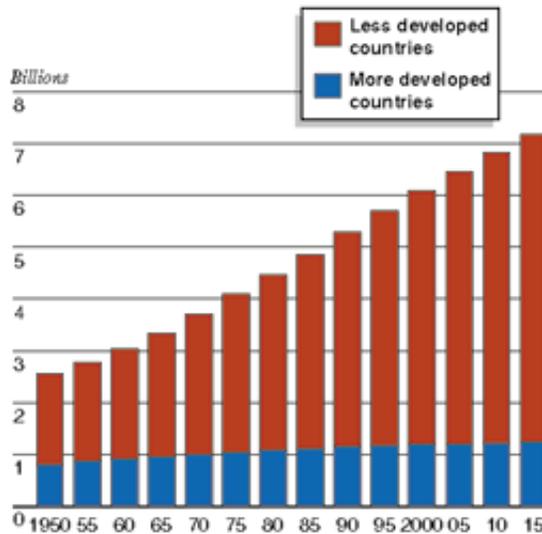
Development Challenge & Opportunity

- Population Growth
- Youthful Unemployed
- Basic Needs: Water, Power, Housing
- Economic Desires (political, etc)

- Developmental Technologies
- Developmental Entrepreneurship
- Developmental Innovations Generally

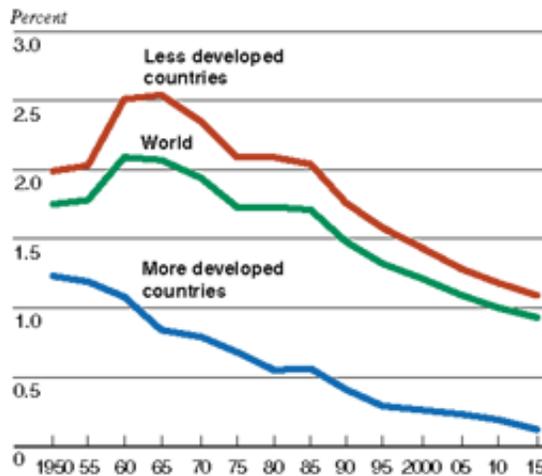
Global Population: 1950-2015

Total



Source: US Bureau of the Census.

Growth Rates



Source: US Bureau of the Census.

Growth of Humanity

- Note slowing of growth rates
- Growth inversely proportional to wealth & income
- Growth especially in large cities in poor nations

The 1G Challenge

- Basic Needs
- Health
- Catastrophe Mitigation
- Shelter
- Farming
- Culture
- Transportation
- Distributed Power
- Information & Communication
- Education
- Business Models
- Finance
- ...

Possible Solutions: Appropriate Technologies

- Low power refrigeration
- Solar stoves
- Water filtration
- Locomotion
- Medical incubator
- Low Cost Eyeglasses
- Local & Distributed power
- Clean combustion
- Clean Water

...

- Enfield Bullet, Sristi
- Ravi Kuchimanchi, AID-India
- <http://www.thinkcycle.org>
- Médecins Sans Frontières
- Murcott Group, Civil Engineering
- Ashok Gadgil UV Treatment

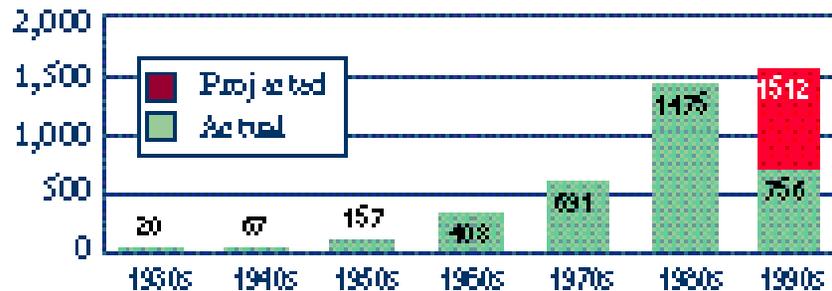
Undervalued Human Capital

- Creative Talent is only unbounded resource!
- Consider the US Case
- Build educational institutions
- Be clever with incentive structures to motivate self-improvement

MIT Alumni Legacy

Chart 7 MIT-RELATED COMPANIES

by Decade Founded



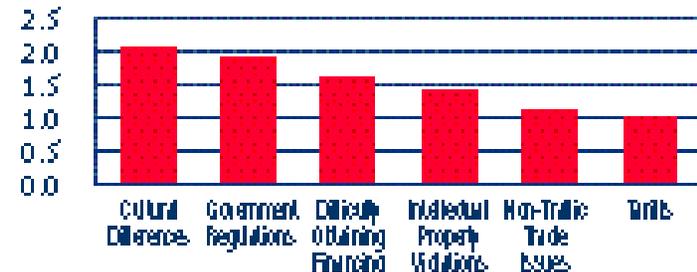
Data for 1990s includes projected formations for the remainder of the decade at current rate

4,000 companies
> 1M employees
~\$250 Billion sales

<http://web.mit.edu/newsoffice/founders>

Chart 11 OBSTACLES TO SUCCESS IN FOREIGN MARKETS

Average Across All Respondents
5=Most Important, 0=Not Important



Possible Solutions: Leapfrog Technologies

e.g. Portable Computers
for the people

e.g. Cellphones per village

e.g. Intellectual capital development via
school or innovator network system

Developmental Entrepreneurship

- MicroEntrepreneurship
- MicroFinance
- MicroSavings
- MicroCredit
- MicroVC
- MicroFranchising

- Entrepreneurial NGOs
- Social Ventures
and more...

New Types of Organization

- HLL
- Dabbawallas
- E-Choupal
- Amul

Developmental Entrepreneurship Class: Three Interwoven Themes

- Entrepreneurial Models for Development
- MicroEntrepreneurship – franchising, financing, VCs, credit...
- Disruptive Technology

Executive Summaries 2001 & 2002

1. ***Mercados Infinitos*** -- distribution & delivery services in Mexico
2. ***SEID*** -- global talent & development challenge matchmaker
3. ***Remittance International*** – community-building fin'l services Lat. America
4. ***CureAll*** -- mobile health care of syphilis in southern africa
5. ***Dlo Prop*** -- clean water via chlorination in Haiti
6. ***Safe Storage*** -- non-electric cold storage of vaccines in India
7. ***Ca:sh*** -- PDA system for health and info services in India
8. ***Grow Networks*** -- e-mailman wireless network for India and Costa Rica
9. ***Diabetic Pulse*** -- non-invasive diagnostic & self-manag'nt system for India
10. ***Asian Credit Organization*** -- credit rating & financial info for China
11. ***Eco-Meter*** -- ecological electricity distribution system for Asia
12. ***DissemiNation*** -- FM radio-delivered digital info in Latin America & Russia
13. ***InformUs*** -- info & financial services for farmers in India
14. ***Cresimento e Valor*** -- philanthropic investor services in Brazil
15. ***Mexico Board of Trade*** -- efficient market for agriproducts in Mexico
16. ***MobilBanco*** -- electronic pre-payment for cellphones in Latin America
17. ***Green Cycle*** – eco-composting for waste management and sanitation
18. ***Bilingual Storyteller*** – toys for kids which speak multiple languages
19. ***BlueEnergy*** – wind power systems
20. ***Communifactory*** – building communities of Habitats for Humanity
21. ***Safe Water Ventures*** -- purification, storage, and distribution of drinking water
22. ***Sustainable Education Solutions*** – microfinanced teacher-training
23. ***TikaNet*** – rural health care systems in India
24. ***Unwired*** – participatory media research venture in Latin America & Asia
25. ***IKN*** – International Knowledge Network for faculty training & development

Continuing Ventures

1. *Mercados Infinitos* -- distribution & delivery services in Mexico
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Example Cases We'll Feature

- Low Cost Eyecare
- Appropriate Medical Therapies
- Distributed Power Generation
- Printed PCs
- Telecom Networks
- Innovator Networks

Selecting DE Opportunities to work on from MIT & Beyond...

- Meeting peers in class
- Surfing web, paying attention
- Handouts
- Look about MIT & Labs
- Talk to us!

Example Online Idea Sources

- ThinkCycle

<http://www.thinkcycle.org>

<http://www.thinkcycle.org/start/>

- Sristi

<http://www.sristi.org>

- DE Course Webpage

<http://courses.media.mit.edu/2002fall/de/>

DE Expected Deliverables

- Business Plan Executive Summary
complying with the MIT \$50K
Entrepreneurship Competition \$1K
Warmup guidelines (early November)
- IDEAS Competition Entry

DE Participation Includes...

- Showing up
- Independent Research
- Contributing weekly original & interesting weblink to ThinkCycle's Developmental Entrepreneurship Topic

<http://www.thinkcycle.org>

Next: Personal *Elevator Pitch*

- I'm *First Name Last Name*
- Student in *School/Department*
- Studying in *Program/Field*
- *Last Role at Previous Organization*
- Now very interested in
Short Idea Summary

Short Summary of Interests

One sentence or phrase with keywords

For Example...

- “...implications of wireless and mobile devices on remote medical services”
- “...ultra-low cost ‘penny diagnostics’ of ailments, infestation, cleanliness”
- “...building and deploying distributed electric power systems”