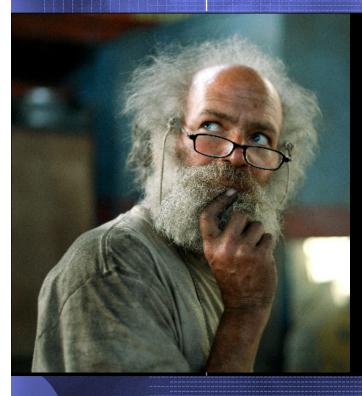


#### IBM Systems and Technology Group

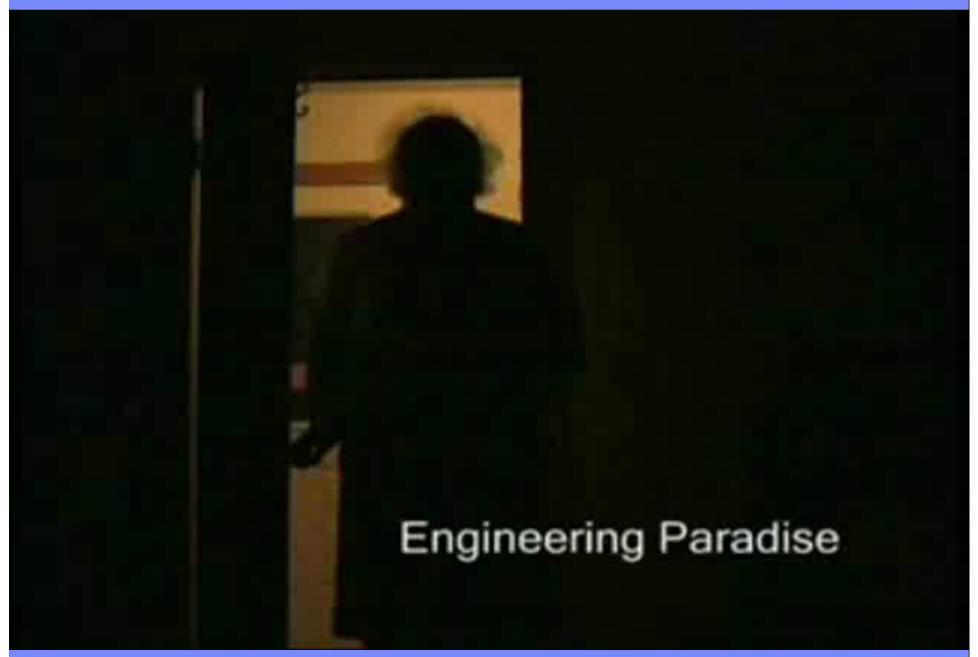


## Engineering Paradise

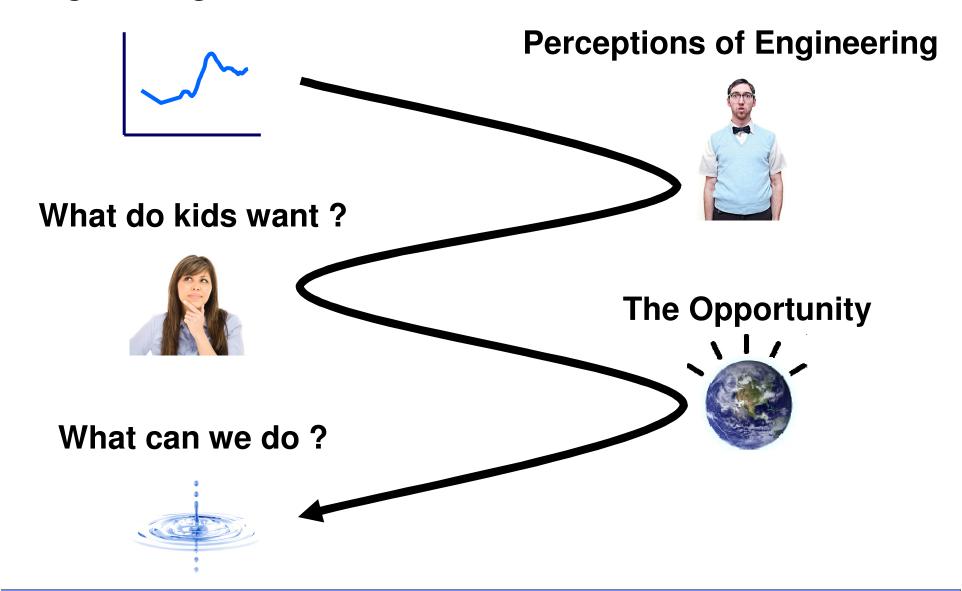
Inspiring kids to build a Smarter Planet

John Cohn Ph.D.
IBM Fellow
IBM Systems and Technology Group
johncohn@us.ibm.com

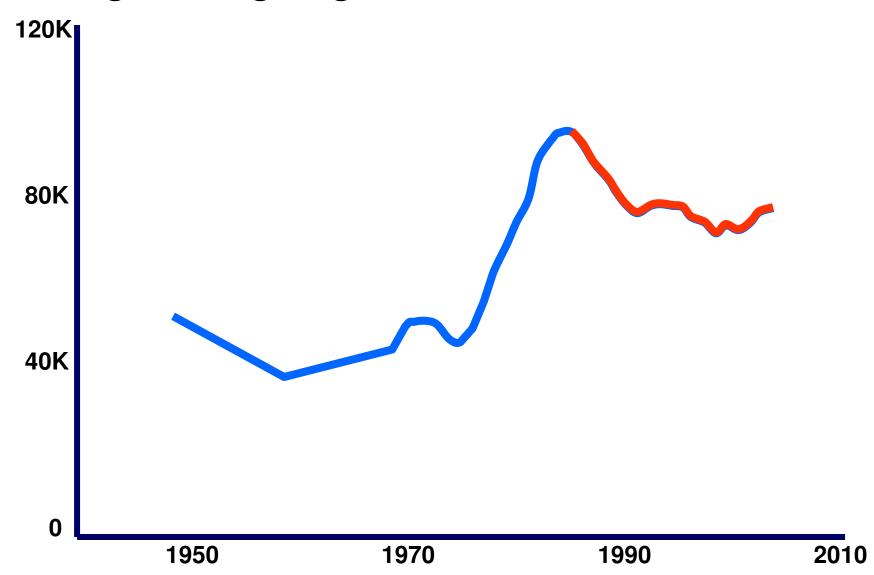
I want YOU
to help ME
get kids excited about
Engineering Careers



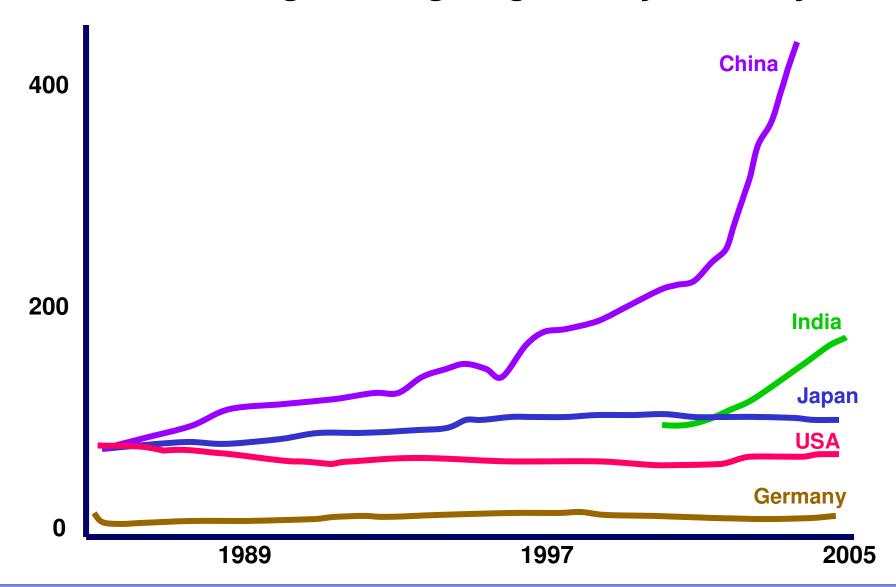
#### **Engineering career trends**



## **US Engineering Degrees**



#### Science and Engineering Degrees by Country



22%

of the world's engineers are women



80%

of kids worldwide would not consider a technical career



## **Public Perception of Engineering**

<u>Attributes</u>	<u>Engineers</u>	<u>Scientists</u>
Creates economic growth	69%	25%
Would make a strong leader	56%	32%
Cares about the community	37%	51%
Sensitive to societal concerns	28%	61%
Improves the quality of life	22%	77%
Protects the environment	17%	71%
Saves lives	14 %	82%

#### What they hear:

1. "Engineering is hard"

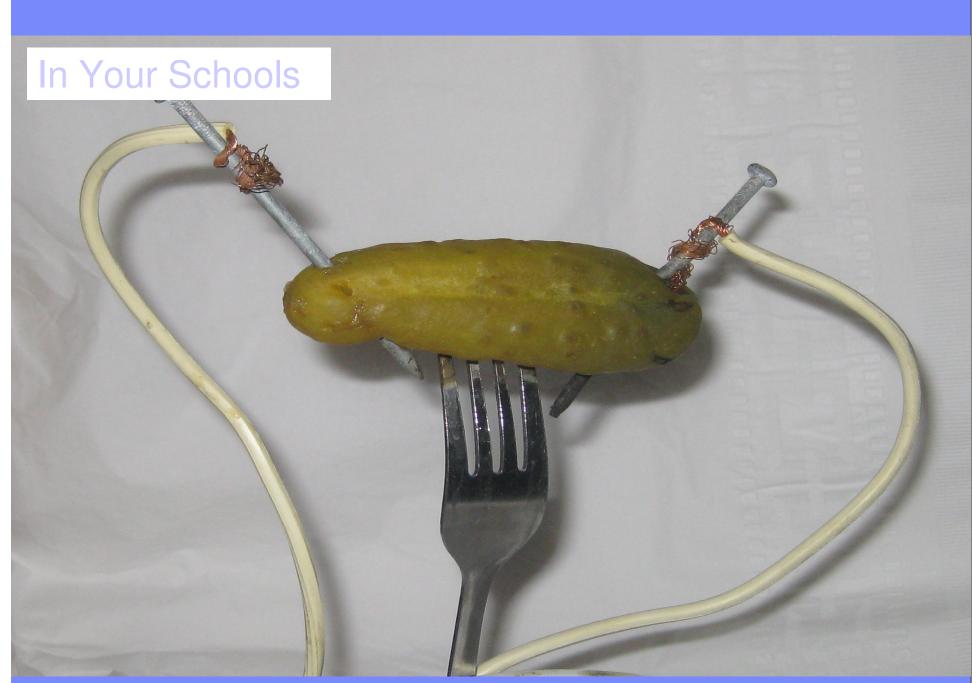
2. "Must be good at math and science"

3. "It's not for everyone"



#### What they don't hear:



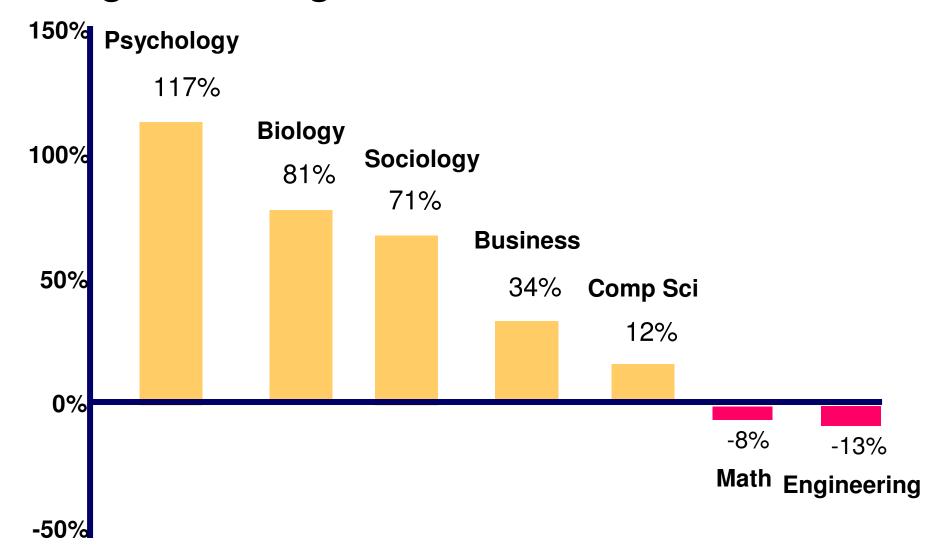


# 85%

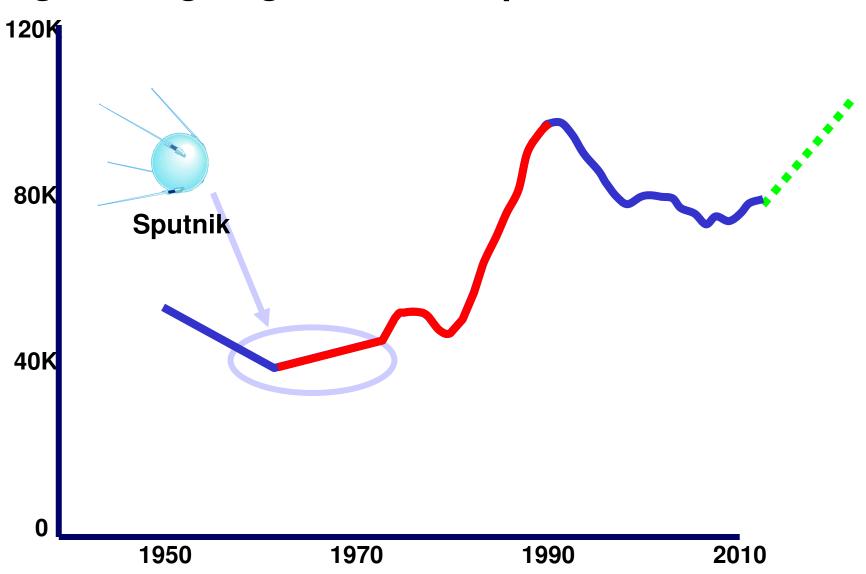
of kids worldwide want work that is meaningful and important



#### **Change in US Degree Choices 1985-2005**

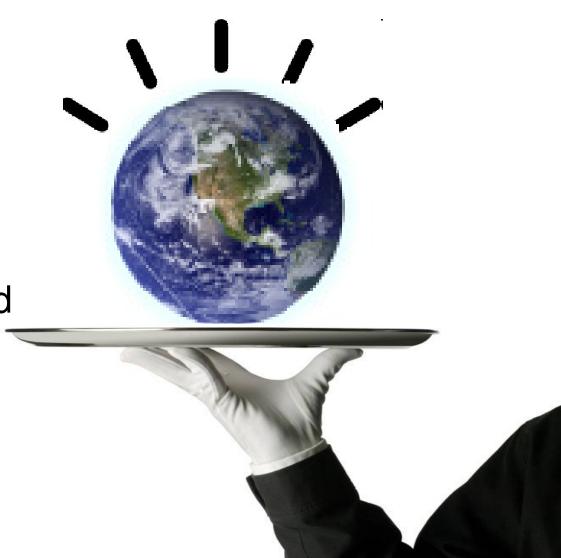


### **Engineering Degrees – The Sputnik Effect**



81%

of kids worldwide believe that we must address environmental and energy issues



#### Our Marketing Agency







We will restore science to its rightful place .....

We will harness the sun and the winds and the soil to fuel our cars and run our factories.

**US Pres Obama** 

We must make conserving energy, decreasing energy consumption, protecting the environment ..... the breakthrough point

Chinese Premier Wen

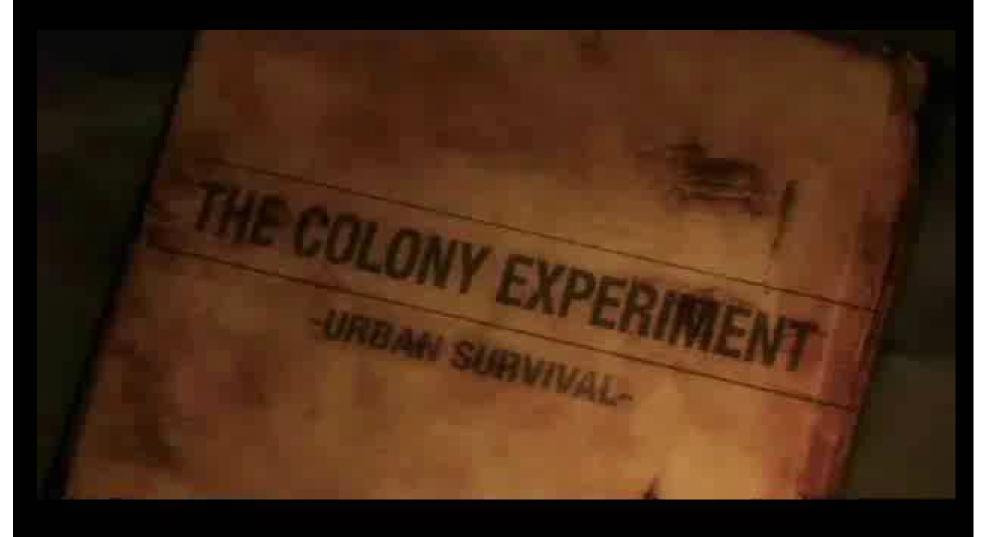
"We will pool all our scientific, technical and managerial talents, ... to develop solar energy as a source of abundant energy to power our economy"

Indian Prime Minister Singh

### How can we do?



## What I did about it



## The Challenges

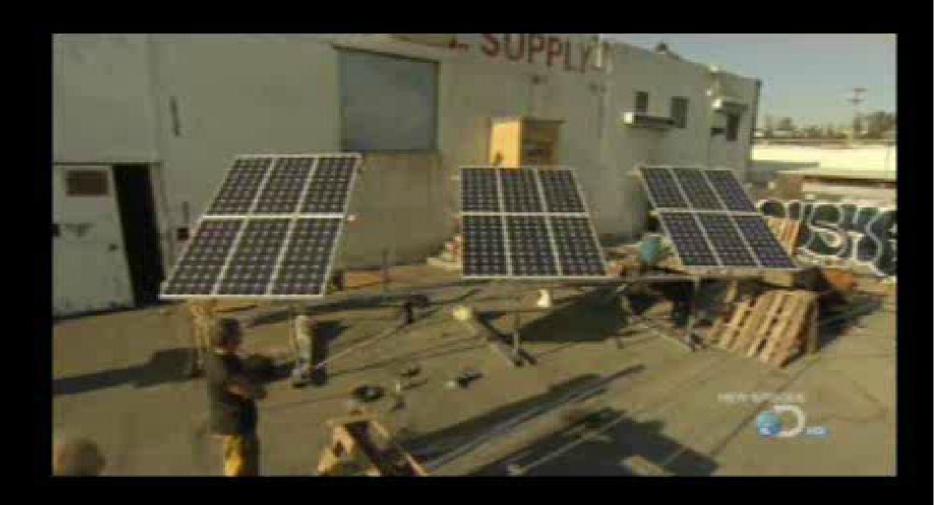


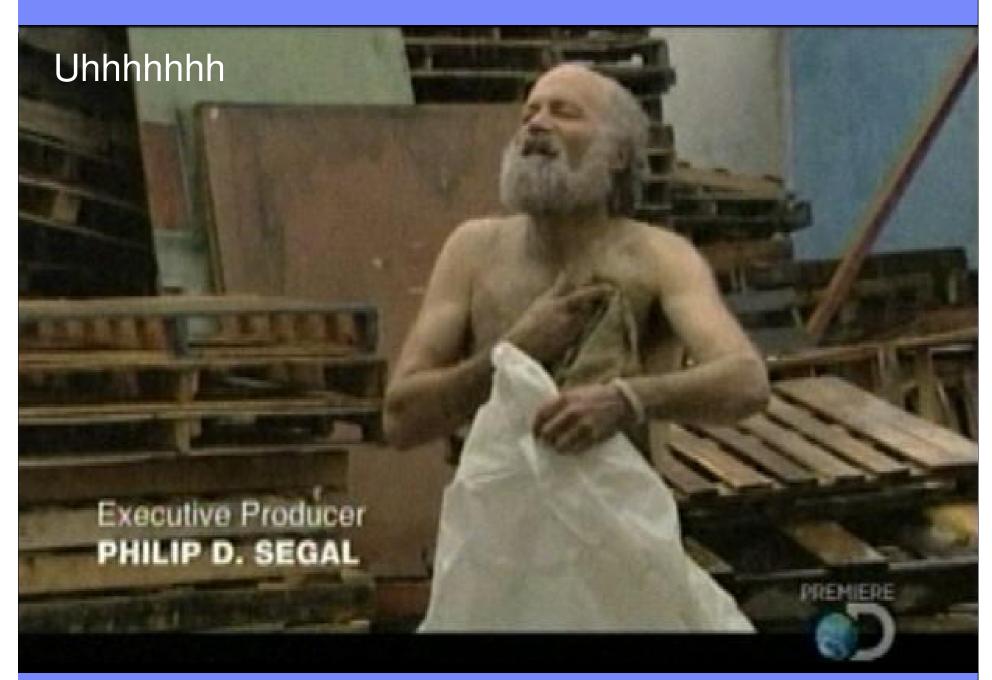
## The Builds: Water Filter





## The Builds: Solar Tracker





### The Builds: The Ozonator





