

# Entrepreneurship and IBM

## for a Smarter Planet

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# Reality Today in our Globally Integrated World

- Access to capital and credit crunch
- Economic downturn and future uncertainty
- Volatile oil prices and energy shortfalls
- Information explosion and opportunity growth
- Globalization and emerging economies
- New customer demands and business models
- Environmental issues that affect the planet



**The world is connected:  
Economically, Socially, Technically**

# Building a Smarter Planet



The world is flatter.

The world is smaller.

The world is getting smarter.

Because it can.

Because it must.

Because we want it to.

# Role of Entrepreneurs in the Economy

## Entrepreneurs are **innovators**

- They create new goods and services.
- They observe an opportunity.
- They improve existing products.

## Entrepreneurs provide choice

- They add goods and services to the marketplace.
- They disrupt the status quo.
- They design different approaches to familiar problems.

## Entrepreneurs provide jobs

- They hire workers for their businesses.
- They consume resources, thus providing jobs in the industries
- that supply those resources.

## Entrepreneurs help the economy grow



- **Financing - Access** to sources of capital
  - ✓ Regulation of capital markets
  - ✓ Public and private financing
  - ✓ Venture Capital and Angel investors
  
- **Skilled Workforce - Access** to people
  
- **Regulatory environment – Multi - Government** policies and processes
  - ✓ Protection of Intellectual Property
  - ✓ Tax policies
  - ✓ Licensing process
  - ✓ Labor regulations
  
- **Resources - Access** to information, infrastructure and institutional support
  - ✓ Technical support
  - ✓ Business incubators
  
- **Trust and Collaboration - Entry** to value chain



# Entrepreneurship Programs

**Inspire.** Introduce the notion of enterprising behavior to young people who otherwise might not have considered it as a path in their life

**Connect.** Network young people across national boundaries in a global effort to find new ideas at the intersection of cultures & disciplines

**Inform:** Demonstrate that drive to nurture enterprising talent needs business, education, government, voluntary organizations and media to work together

**Mentor.** Enlist active and inspirational entrepreneurs globally to coach and mentor the next generation of enterprise talent

**Engage.** Demonstrate to opinion leaders and policy makers that entrepreneurship is central to a nation's economic health and culture

## IBM Resources to Help Entrepreneurs Innovate and go Global

Unleash it Challenge – Top 5 will present to VC in Spring

[www.unleashingideas.org](http://www.unleashingideas.org)

IBM Small Business Toolkit: Information, Resources and Tools

[www.sme.toolkit.org](http://www.sme.toolkit.org)

Innovation Centers - 40 Innovation Centers around the world.

•[www-304.ibm.com/jct01005c/isv/spc/](http://www-304.ibm.com/jct01005c/isv/spc/)

## One Word for Entrepreneurs - INNOVATORS

# *The Changing Nature and Scope of Innovation*

*Open*

*Collaborative*

*Product and Services Innovation*

*Process Innovation*

*Business Model Innovation*

*Societal Innovation*

*Multi-disciplinary*

*Global*

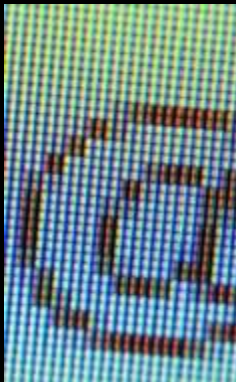


# Innovative Beyond Customer Imagination



## Nintendo: Building market share with customer collaboration

- To regain leadership, Nintendo leveraged its core customer segment
  - Established online community of expert loyal gamers called “Sages”
  - Offered incentives for information and community contributions
  - Gained valuable insights into market needs
- Nintendo connected with new customers
  - New groups: women and older men
  - Influenced everything from game offerings to new product design
  - Regaining market leadership from a low of 22 % to 44% market share



## *Today's Gamer, Tomorrow's CEO?*

- Open
- Global
- Rapid
- Knowledge Based





An estimated **1.2 billion people** or **1/5th** of our planet's population are online – expected to be **2 billion** by 2011

We will soon have **4 Billion** mobile phones WW

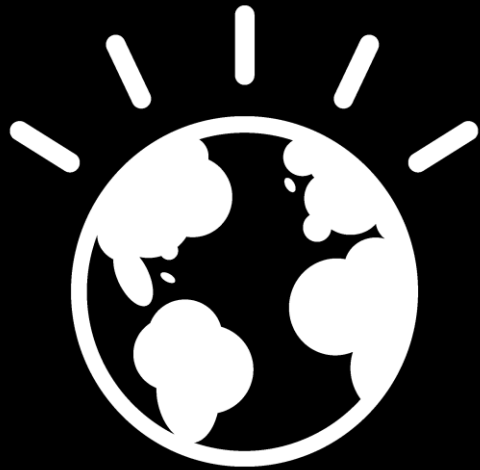
Last year, we produced **more transistors** (at lower cost) than **grains of rice**, growing to **1 Billion** per person.

Numbers of text messages sent and received every day **exceeds the world's total population**

If MySpace were a country, it would rank as the **11th largest population in the world**



We will soon have **a trillion** connected objects – cars, appliances, cameras, roadways, pipelines – comprising the "**Internet of Things.**"



U.S. CPG companies and retailers lose **\$40 billion** annually due to inefficient supply chains.

In NA, **up to 22 %** of total port volume is empty containers. Port of Jersey has **100,000 empty containers** sitting in storage – nearly **\$200 million**.

In USA alone, **2.2 million** dispensing errors are made a year because of handwritten prescriptions.

Congested roadways cost **\$78 billion annually** from **4.2 billion lost hours** and **2.9 billion gallons** of wasted gas.

In USA, a **typical carrot** has traveled **1,600 miles**, a potato **1,200 miles**, a chuck roast **600 miles**..... grocers and consumers throw away **\$48 billion** worth of food every year.

# **FOR A SMARTER WORLD**

**We know our world is becoming smaller ....and flatter.**

**Our world is about to become smarter.**

**We think about IT as data centers and PC's.**

**We think about infrastructure as factories, roads and pipelines.**

**These worlds are converging.**

**Entrepreneurs will build a smarter world.**

## SMART HEALTH CARE

IBM is helping ActiveCare Network monitor over 12,000 clinics and provide over two million patients with the proper delivery network for injections, vaccines and other pharmaceuticals.

ACN is using IBM software to lower the cost of therapy by 90 percent and reduce time and cost required to develop patient and clinic applications by 60 percent.

## SMART TRAFFIC



IBM is working with Brisbane, London, Singapore and Stockholm to deploy smarter traffic systems. At least 20 other cities have active bids to do the same.

Stockholm has experienced 20% less traffic, 12% drop in emissions and 40,000 additional daily users of public transportation using SMART TRAFFIC.

## SMART TRACKING

IBM and Matic are developing a smarter food tracking solution, innovative and first of a kind in the Nordic region...

...it uses RFID technology to track and trace meat and poultry from farms, through supply chains, to supermarket shelves.





We've only just begun to uncover what is possible on a smarter planet.

The question is ...

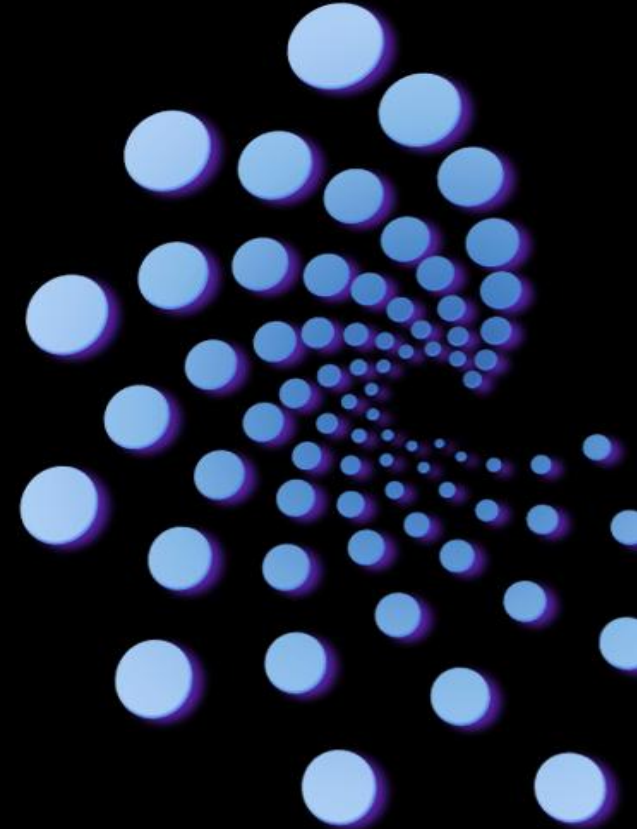
What will WE do with it?

# Global Innovation Outlook

Identifying and Acting on Issues Affecting Business and Societies

## *Key Findings*

- Open, multi-disciplinary, global collaboration enables growth opportunities
- Leveraging intellectual *capital* is more important than protecting intellectual property
- **Without dramatic change, it is unlikely that institutions of higher learning will keep pace with dynamics of work**



# Commission on the Future of Higher Education

Led by U.S. Secretary of Education Margaret Spellings

- Develop a national strategy for post-secondary education
  - Meet the needs of America's diverse population
  - Address economic and workforce needs
- Preserve America's lead in preparing students for the high-skilled, high-value jobs of the future



# Commission on the Future of Higher Education

*Among the Findings ...*

*“Government and institutional policies created during a different era are impeding the expansion of models designed to meet the nation’s workforce needs”*



# America Must Lead in Services Innovation

## World's Largest Labor Forces

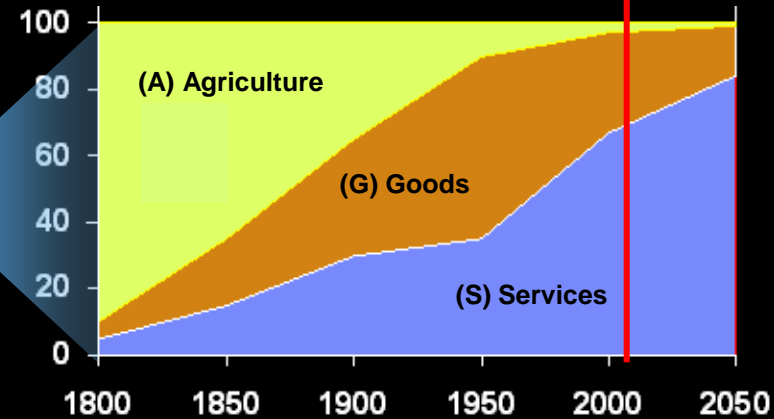
A = Agriculture, G = Goods, S = Services

Nation	% ww Labor	% A	% G	% S	Approx. 25 yr % growth in services
China	25.6	43	25	32	191
India	16.5	60	12	28	28
<b>USA</b>	<b>4.9</b>	<b>2</b>	<b>20</b>	<b>78</b>	<b>21</b>
Indonesia	3.5	43	18	39	35
Brazil	3.2	20	14	66	20
Russia	2.4	11	29	60	38
Bangladesh	2.2	63	11	26	30
Japan	2.1	5	28	68	40
Nigeria	1.6	70	10	20	30

2008

## U.S. Job Shift to Services

2008



Service sector employment is growing rapidly in both developed and developing nations.

# Services Innovation Requires Uniquely Skilled People



**Economics and Social Sciences**

**Business Anthropology**

**Organization Change & Learning**

**Business and Management**

**Science and Engineering**

**Industrial & Systems Engineering**

**Computer Science & Info. Systems**

**Math and Operations Research**

# *Inspiring the Next Generation of Leaders*

## *Transition to Teaching Program*

- **Matching critical employee skills to math & science teaching opportunities**
  - *76 million corporate baby boomers nearing retirement age*
- **Helping employees earn certification, secure a teaching position**
  - *On-line courses, student teaching*
- **Cited by US Department of Education as a national model**



## *Time for Action:*

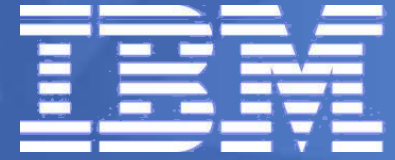
**Collaborate globally and across disciplines**

**Anticipate change and adopt change as your model**

**Integrate CSR into values and strategy**

**Continually ask:**

- **Are we educating the next generation of innovators?**
- **Are we investing in critical research and infrastructure?**
- **Are we creating an environment for innovation to thrive?**



# **Entrepreneurship and IBM for a Smarter Planet**

**THANK YOU!!**

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