

Jugaad Innovation: A Frugal, Flexible, and Inclusive Way to Grow

Jaideep Prabhu

Winton Teatime Talk, December 2, 2013

Unique Features of Indian Innovators

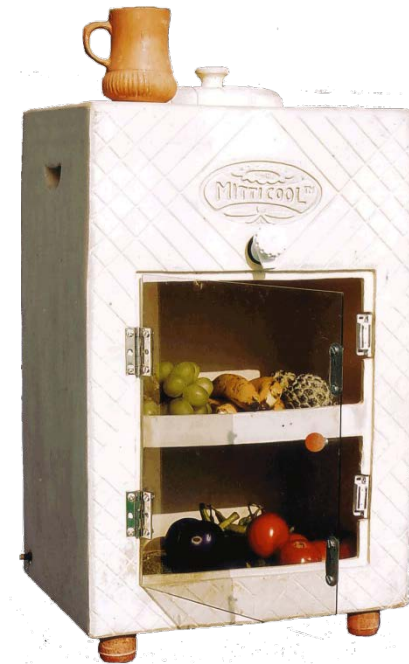
Frugal

Flexible

Inclusive

Thinking Outside the (Ice) Box

Source: <http://gizmodo.com>



Source: <http://www.mitticool.in/>



Thinking Outside the (Hot) Box



Thinking Outside the (Hot) Box

Source: Forbes.com



Source: <http://www.firstenergy.in>



Envirofit's Compact Stoves



Jugaad Innovation

The art of overcoming harsh constraints by improvising an effective solution using limited resources

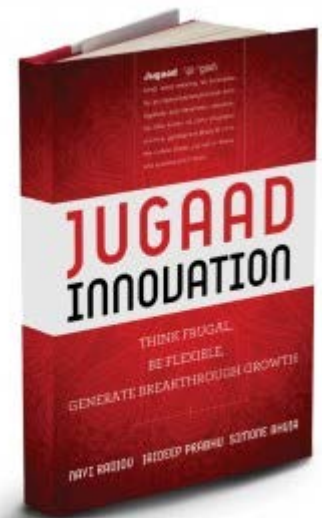
Gambiarra or jeitinho in Brazil

Jua Kali in Kenya

zhizhu changxin in China

DIY in the US

Systeme D in France



Why Does India Need Jugaad?

Upwards of 40% of Indians:

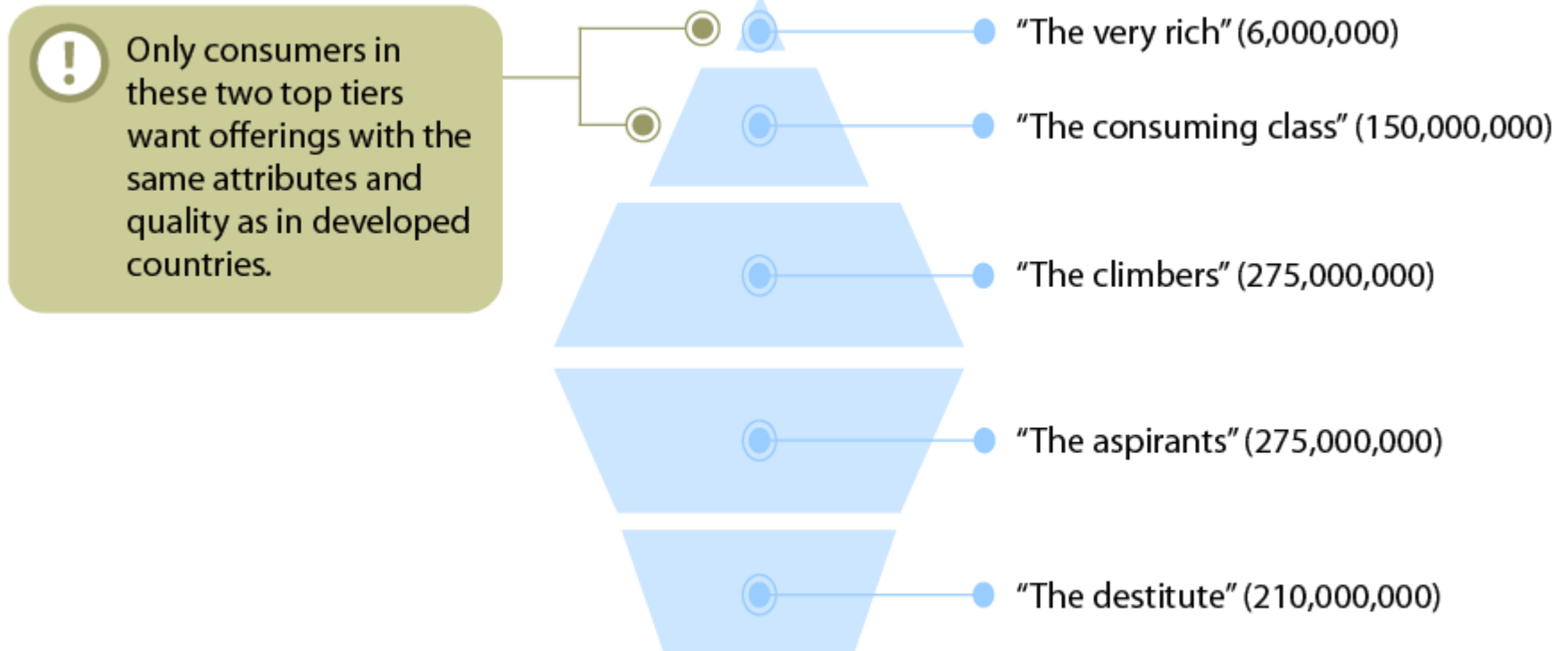
Are unbanked

Are off the electricity grid

Have limited access to healthcare and education

The Indian Socio-Economic Landscape

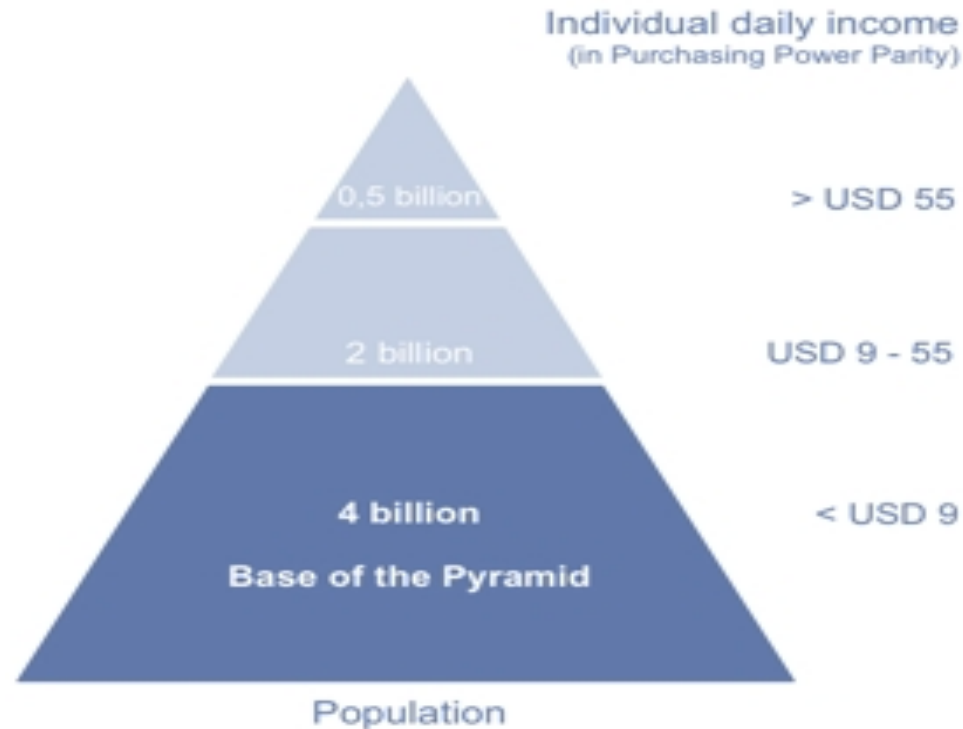
The Indian consumer base isn't homogenous but is divided into five distinct classes



Sources: National Council of Applied Economic Research (NCAER); Shashi Tharoor, "Who is this middle class?" *The Hindu*, May 22, 2005; Tarun Khanna and Krishna G. Palepu, "Emerging Giants: Building World-Class Companies In Developing Countries," *Harvard Business Review*, October 2006

Why Does the World Need Jugaad?

The World Economic Pyramid



Source: World Resources Institute

Why Does the World Need Jugaad?

BOP market—\$5 trillion

TOTAL BY INCOME SEGMENT

BOP3000



BOP2500



BOP2000



BOP1500



BOP1000

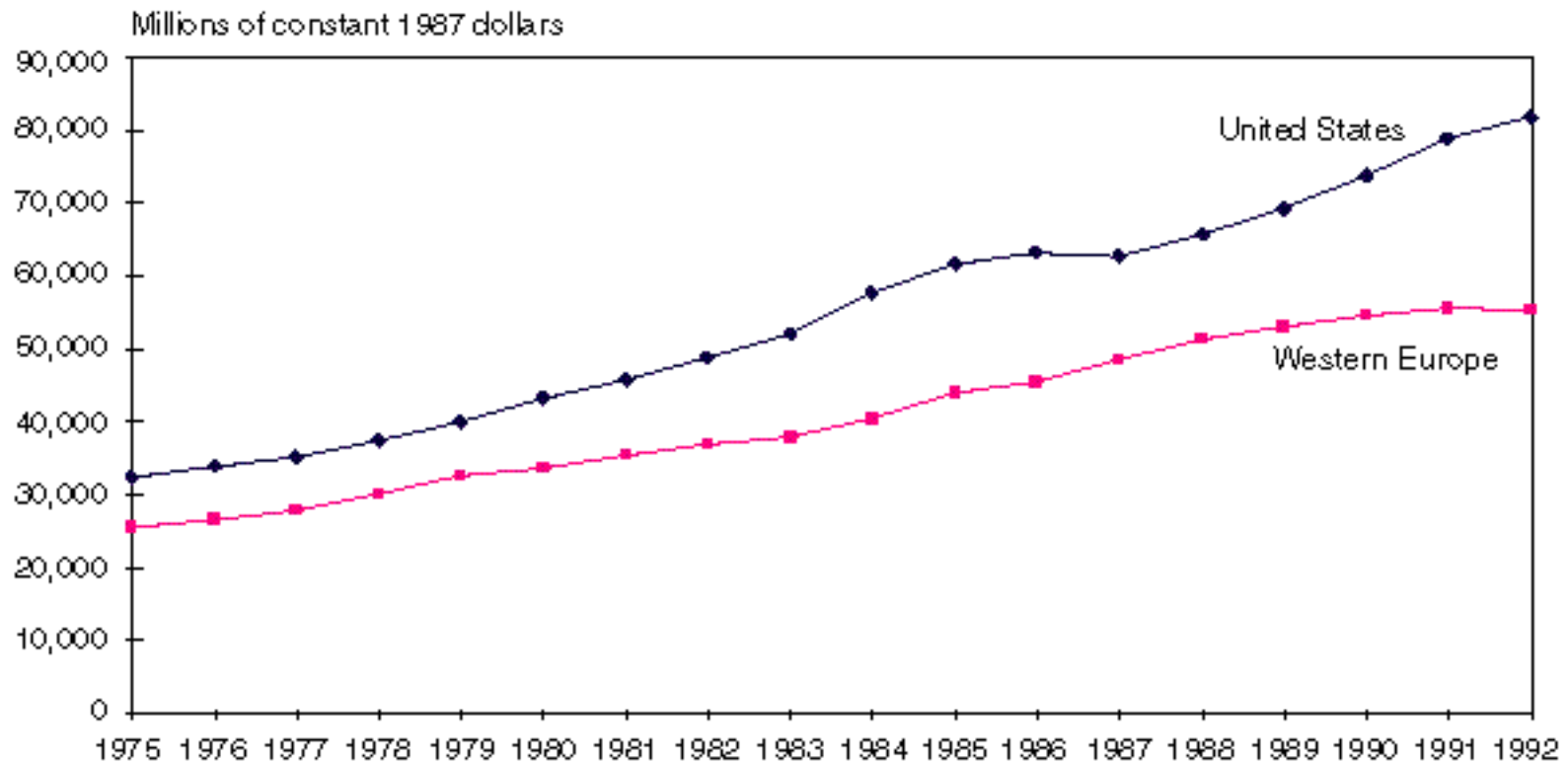


BOP500



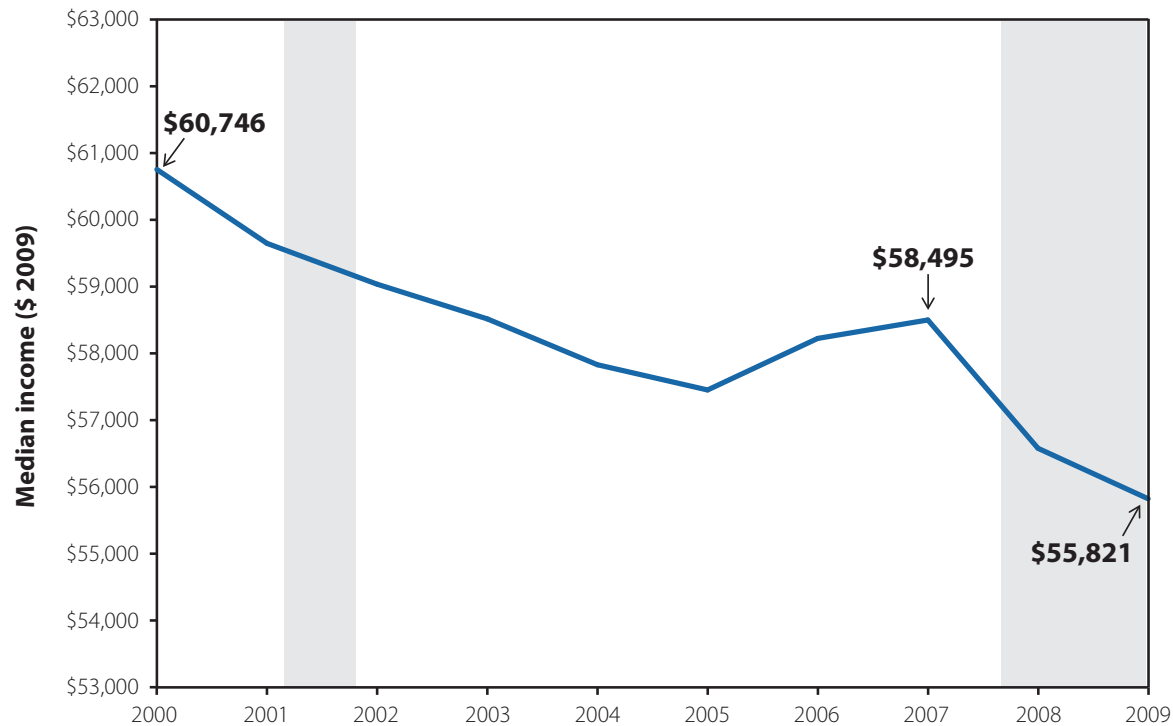
Why Does the West Need Jugaad?

Figure 10. Industrially funded research and development in Western Europe and the United States



Real Incomes Falling

Real median income of working-age households, 2000-09



NOTE: Shaded areas denote recessions.

SOURCE: EPI analysis of U.S. Census Bureau data.

Social Entrepreneurs

Mansukh Bhai and the MittiCool Fridge



Dr Mohan's Mobile Diabetes Clinic



Source: <http://www.drvmohan.com/>



Source: <http://www.worlddiabetesfoundation.org/composite-2731.htm>



Harish Hande and SELCO

SELCO



SELCO SOLAR

Posted On: April 16, 2009
Posted In:

SELCO Solar Pvt. Ltd, a social enterprise established in 1995, provides sustainable energy solutions and services to under-served households and businesses. It was conceived in an effort to dispel three myths associated with sustainable technology and the rural sector as a target customer base:

- 1) Poor people cannot afford sustainable technologies;
- 2) Poor people cannot maintain sustainable technologies;
- 3) Social ventures cannot be run as commercial entities.

SELCO aims to empower its customer by providing a complete package of product, service and consumer financing through grameena banks, cooperative societies, commercial banks and micro-finance institutions.



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SELCO Case Study #126

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CAMBRIDGE
Judge Business School



Green Light Planet: Solar Lighting Kit



Large Indian Organisations

Tata and the Nano



Tata “Swachh” Water Filter



Aakash Tablet



Multinationals Doing Jugaad

GE and Affordable Innovation

ECG machine designed specifically for
India's rural markets

Portable, light, battery operated, reliable,
cheap



Launched in China, and now in the US after
having got FDA approval

Siemens: Foetal Heart Monitor



The Nokia 1100

Specifically for emerging markets:

Dustproof keypad and front face

Built-in flashlight

Over 200 million sold since late 2003



World's best selling handset and consumer electronics device

The Proposition Is Simple

Cash In Cash Out

Person 2 Person Transfer

Airtime Top-Up

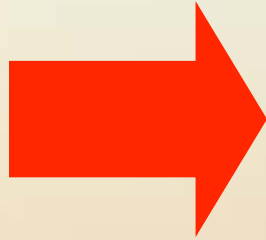
Merchant Payment

Bill Payment

ATM Withdrawals

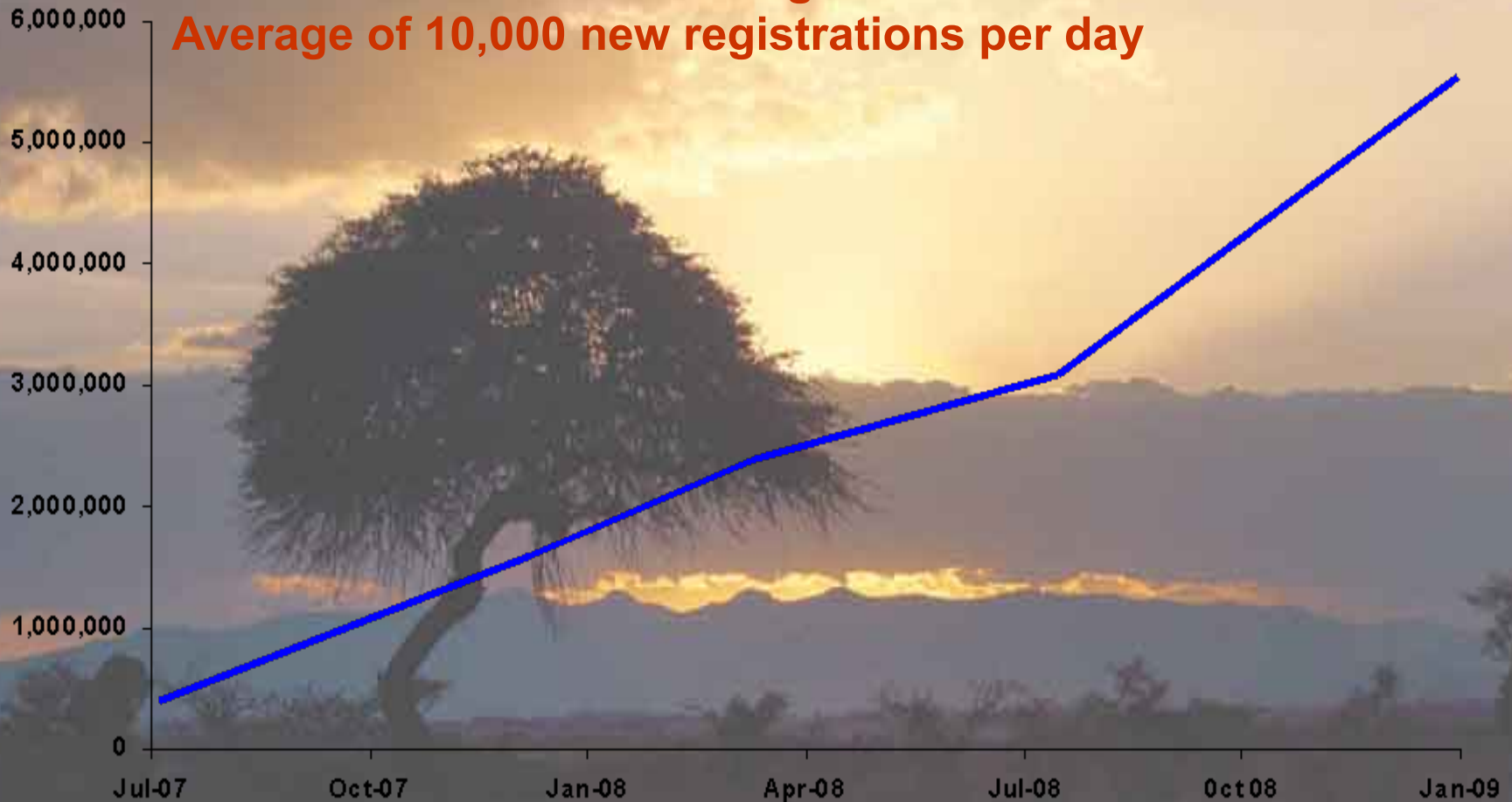
Social Payments

International Transfer



Kenya growth

Over 5 million customers registered
Average of 10,000 new registrations per day



The Better Option.

M Kopa Solar Lighting Solution

(Uses M Pesa as a Payment Tool)



Jugaad in the West?

Design for America and Swipe Sense

To solve problems in health care, education,
and energy in the US



Hospital acquired infections: 2 million people

100,000 deaths each year

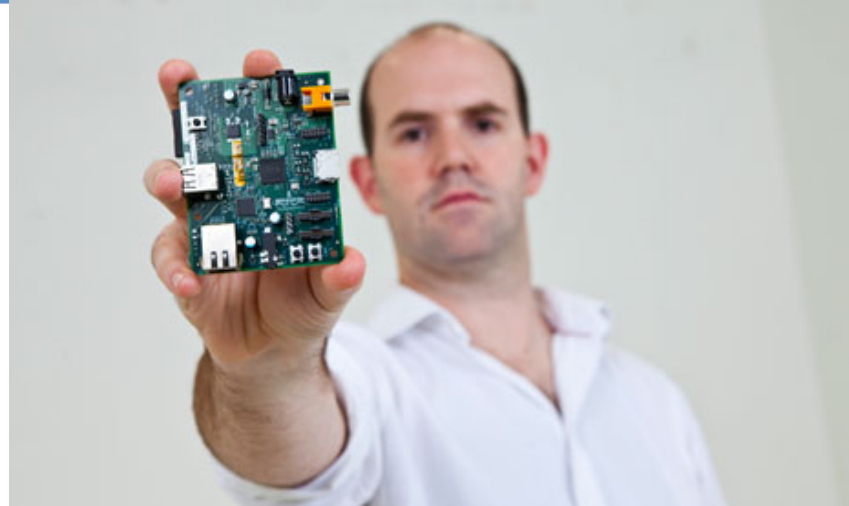
\$2-4 billion dollars in costs to the healthcare
industry



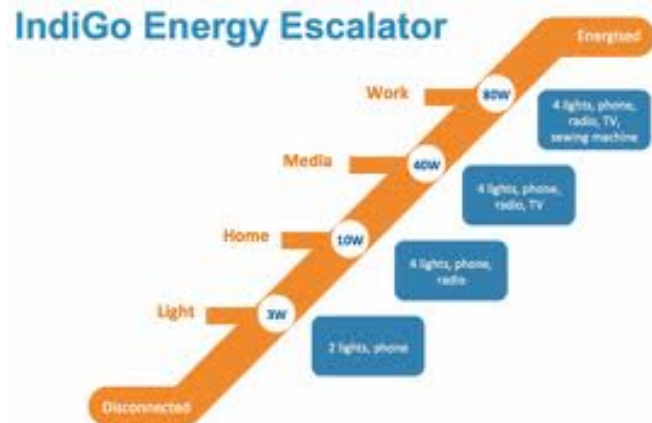
Ebon Upton and the Raspberry Pi

“Design intended to inspire schoolchildren and adults to program sees overwhelming demand as first versions go on sale”

“Demand for Raspberry Pi, the British £22 computer, crashes website”



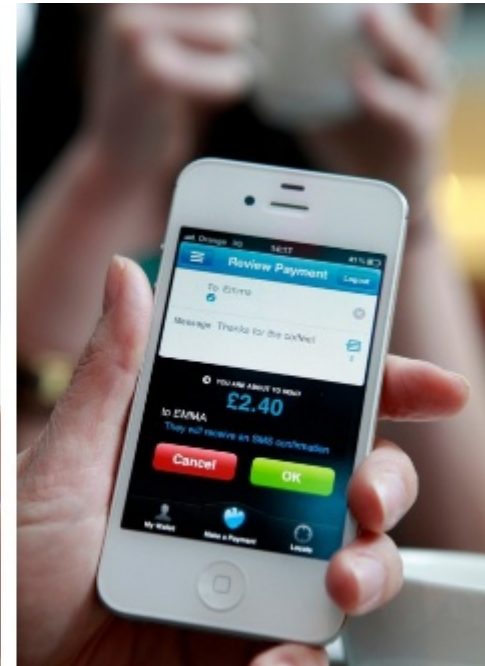
Eight19: Off-Grid Energy Solutions



Barclay's Pingit

Barclays' P2P money transfer app

Passes 500,000 downloads in 3 months after launch



GE Seeks Big

Article

Email Printer Friendly

By PAUL BECKETT

NEW DELHI -- General Electric CEO Jeffrey Immelt on Friday unveiled plans to move GE's health-care businesses into an existing joint venture with Wipro.

"We want to accelerate our growth in India in the future," Mr. Immelt said at a press conference with Wipro Chairman Ravi V. Kamath. "India's health-care market is on the verge of substantial growth, not just in cities like Delhi but throughout the country. We think this is an exceptionally good time to invest in India."



JEFFREY IMMELT

within five to 10 years, he said.

Mr. Immelt said he expected health-care products developed in India to be exported to the rest of the world. "Some of these models and products have applicability in Europe and the U.S.," he said

The two companies have had a joint venture to sell health-care products in India since 1990. Wipro GE Healthcare, in which GE holds 51% and Wipro 49%, already accounts for about 85% of GE Healthcare's sales in India. Added to the venture will be GE's other Indian health-care units, including GE Healthcare Life Sciences, GE Healthcare Medical Diagnostics and GE Medical Systems India.

Financial terms of what Mr. Immelt called a "simplification" of GE's Indian health-care portfolio weren't disclosed.

GE also plans to increase manufacturing of health-care products in India for both the domestic and export markets. Currently, Mr. Immelt said, about 25% of the health-care products the company sells in India are made in India; he intends for that to reach 50% to 75%

MORE IN HEALTH »



STAR ALLIANCE
THE WAY THE EARTH CONNECTS



Companies within this Article

General Electric Co.(GE)	16.18	▼ -0.04	10/9
Wipro Ltd. ADS(WIT)	17.85	▼ -0.47	10/9

Video >



Conclusion

India and the world need frugal, flexible, and inclusive innovation

The UK and the West can gain by engaging with their counterparts in India

Together we can improve lives everywhere

Thank you!