

# Technology for a Better World

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July 13, 2012

App Inventor Summit



# CS 80/180: Technology for a Better World

Information and Communication Technology (ICT)



**Satisfies the quantitative and computational reasoning requirement**

**TECHNO-DARWINISM**  
Where evolution  
meets machines

**LONESOME STARS**  
Where are the  
Milky Way's companions?

**FLU'S FATAL WEAKNESS**  
You never need  
catch it again

# NewScientist

WEEKLY August 22 - 28, 2009

## I, phone

How smartphone apps  
are transforming  
our lives



# Appsolutely everything

The rapid rise in popularity of smartphone apps is matched by the sheer breadth of things you can do with them

## CAR KEYS



Zipcar shows nearby hire cars, which you can unlock and drive away using the app and iPhone alone

## DRUG DEALER



See where (medical) marijuana is available to buy nearby with an app called Cannabis

## NAME THAT TUNE



Want to know the details for the song that's playing? Just hold your smartphone near the speaker and let Midomi or Shazam identify it for you

## SECURITY CHECK



Biowallet scans your iris with the smartphone's camera to unlock access to your secret passwords

## VITAL SIGNS



Cardio Calc, Critical Care and iHeartRate Monitor let you check your pulse and your blood pressure

## PERSONAL SHOPPER



With Gocart and Snaptel, your phone camera can read barcodes, recognise books or album covers, then provide prices and reviews

## SEX AND THE VICINITY



Apps such as Who's Here and Grindr link you up with like-minded people near your location for chat, dating or sex. Be prepared to be sent unsolicited photos of penises

## BABYSITTER



Baby Rattle, Baby Monitor and Diaper Tracker can make life a little easier for tech-savvy parents



# Information

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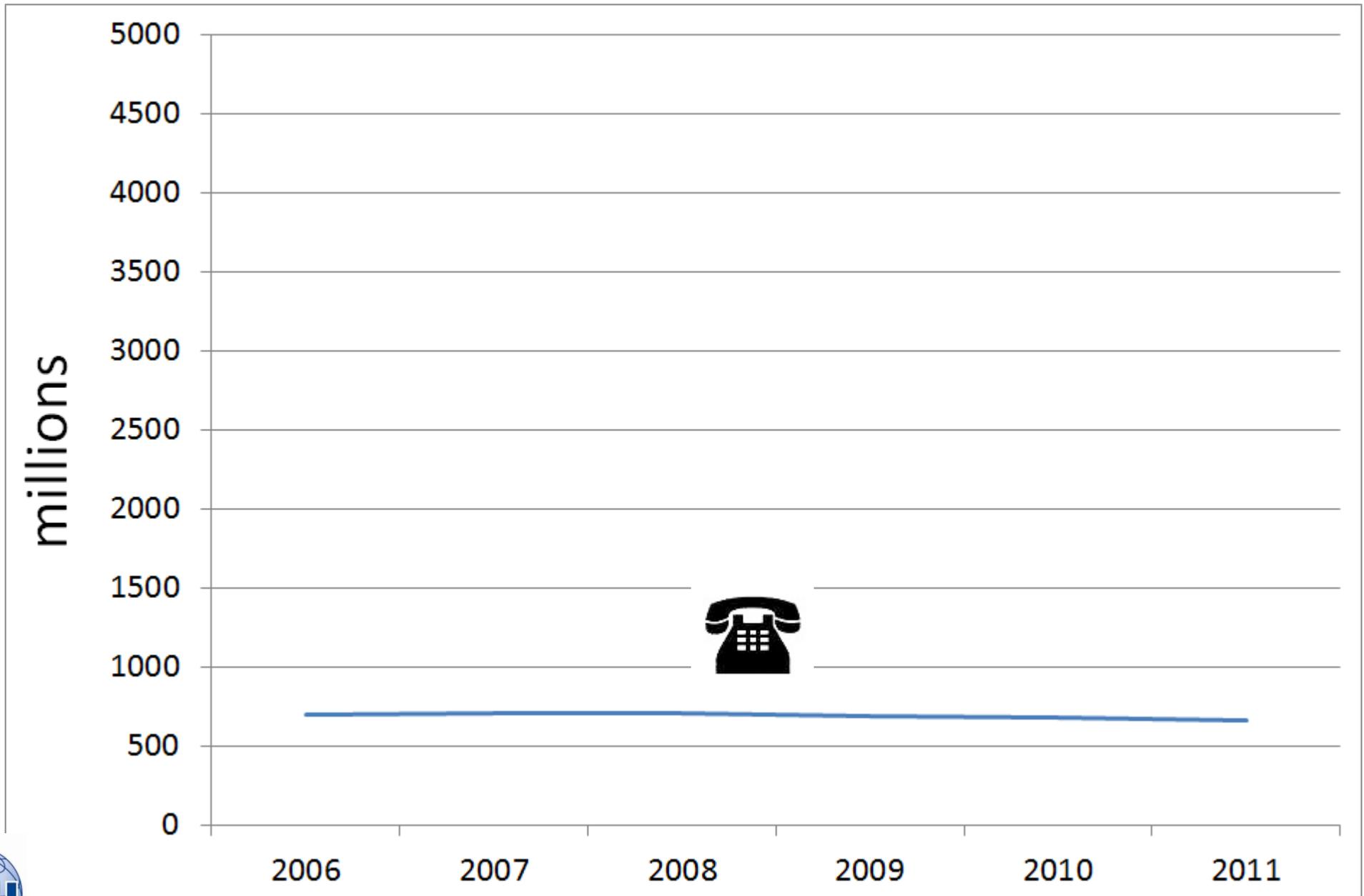
# Communication

# Technology

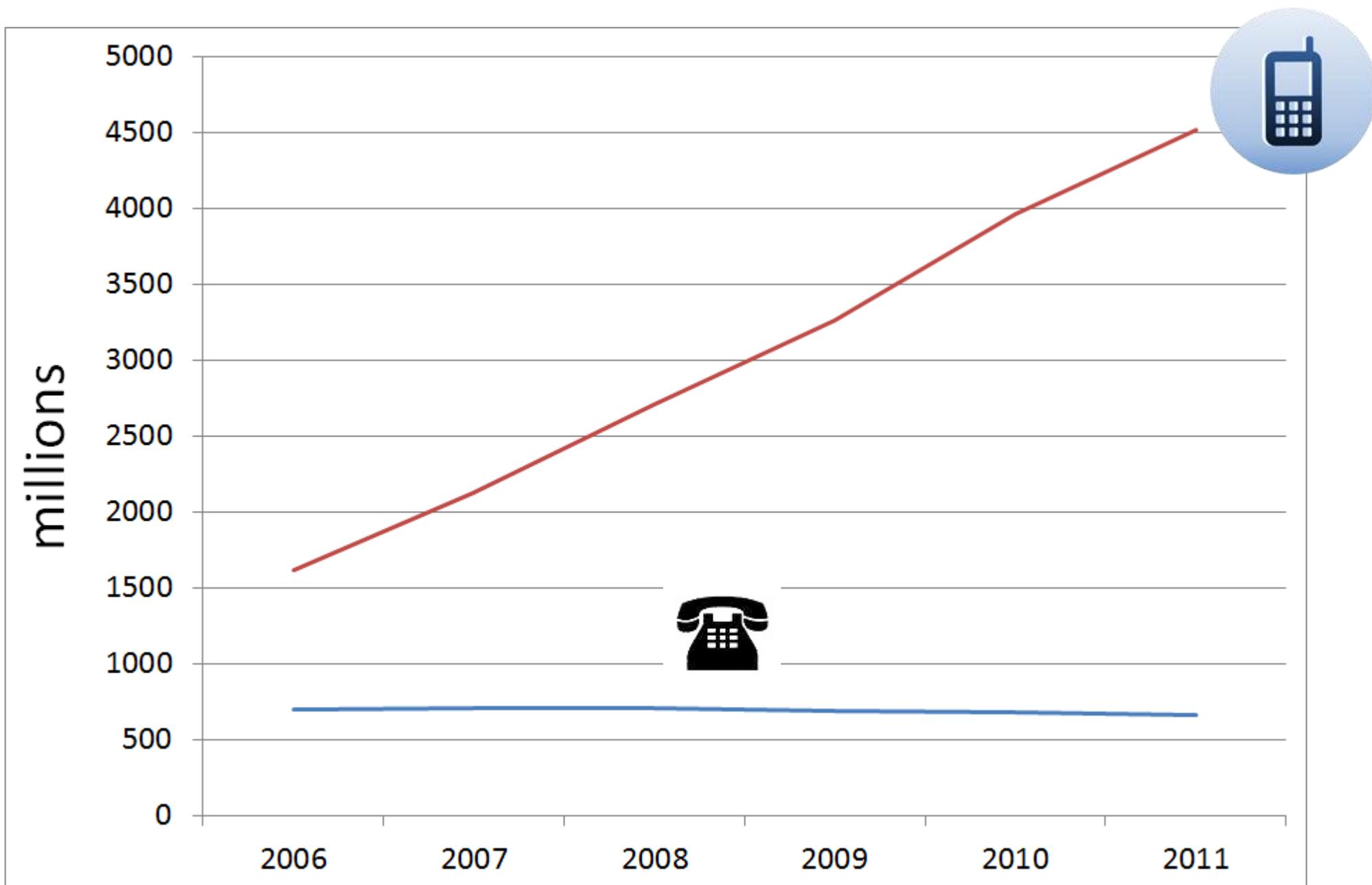
(ICT)



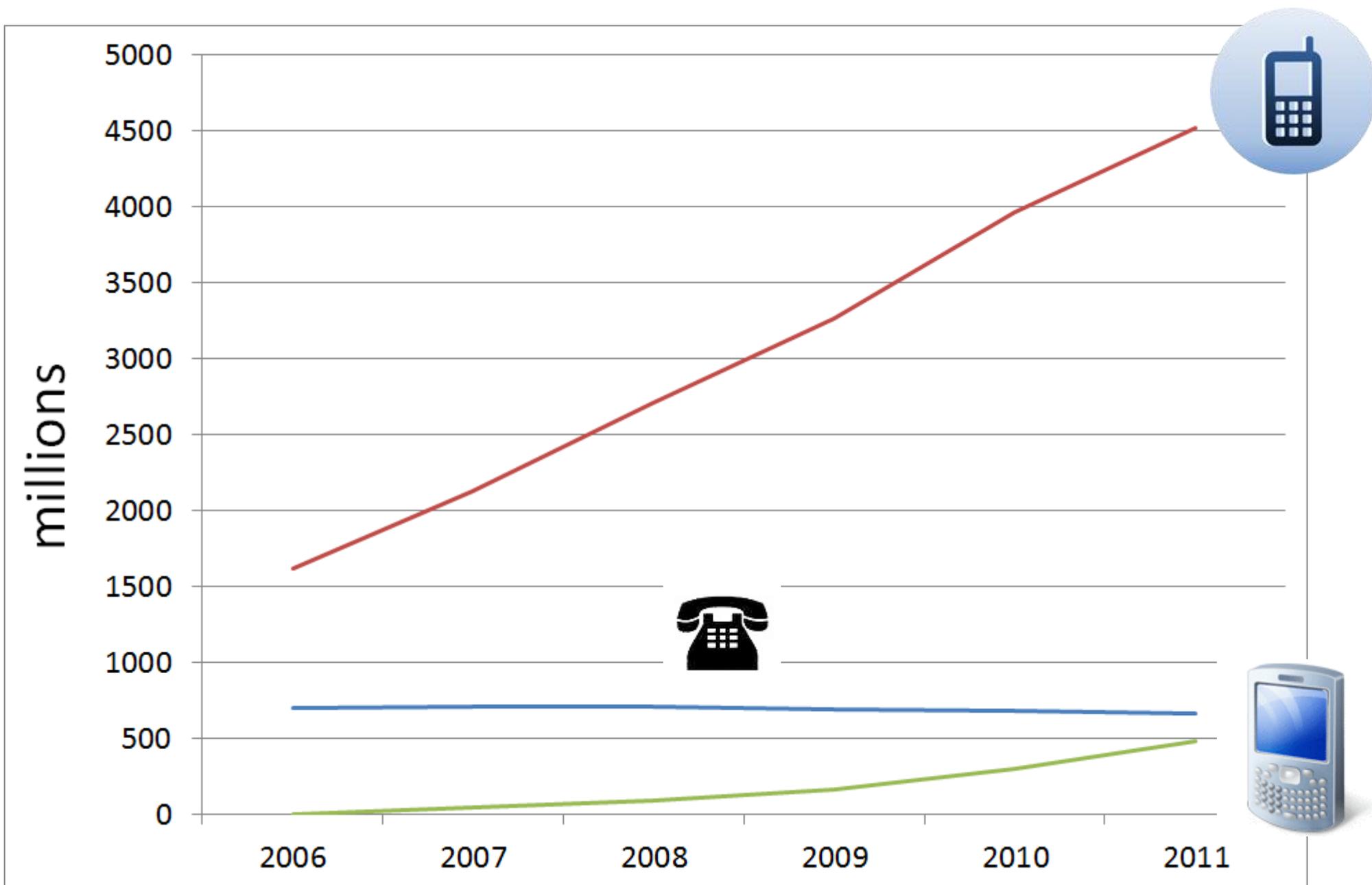
# ICT in the developing world



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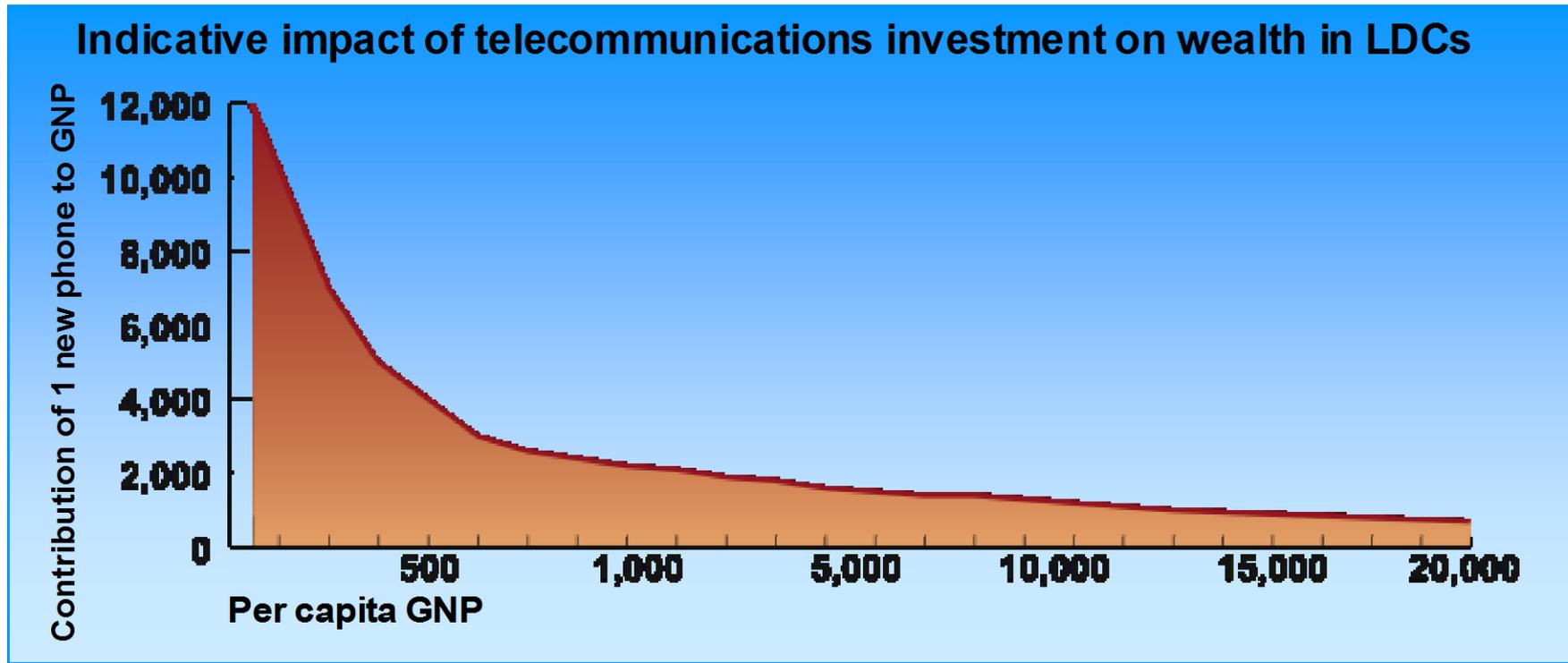


# ICT in the developing world



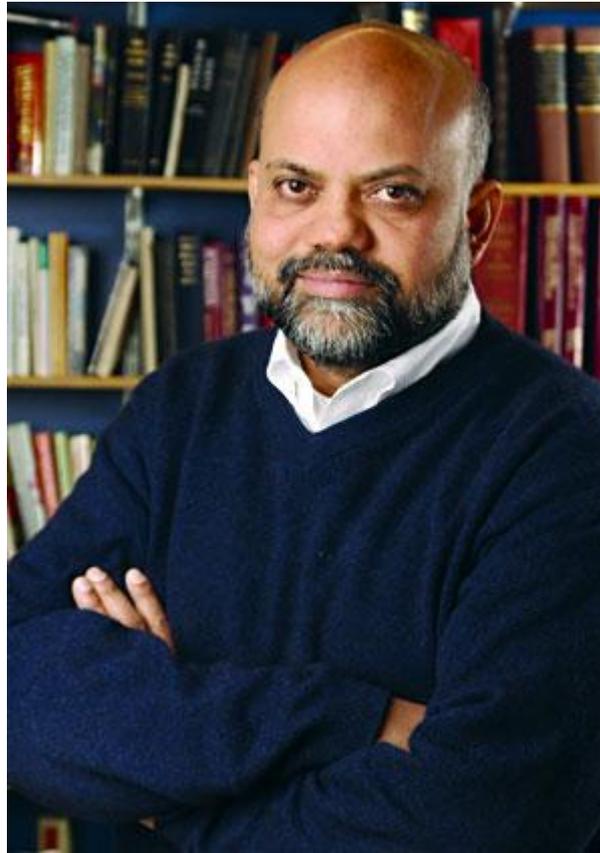
# Effect of a single phone on income

ITU research:



Source: Bottom-Up Entrepreneurship for Democracy and Development, Iqbal Z. Quadir, 6<sup>th</sup> Annual Technologies Ventures Conference, June 11, 2009.

# Iqbal Z. Quadir (1958-)

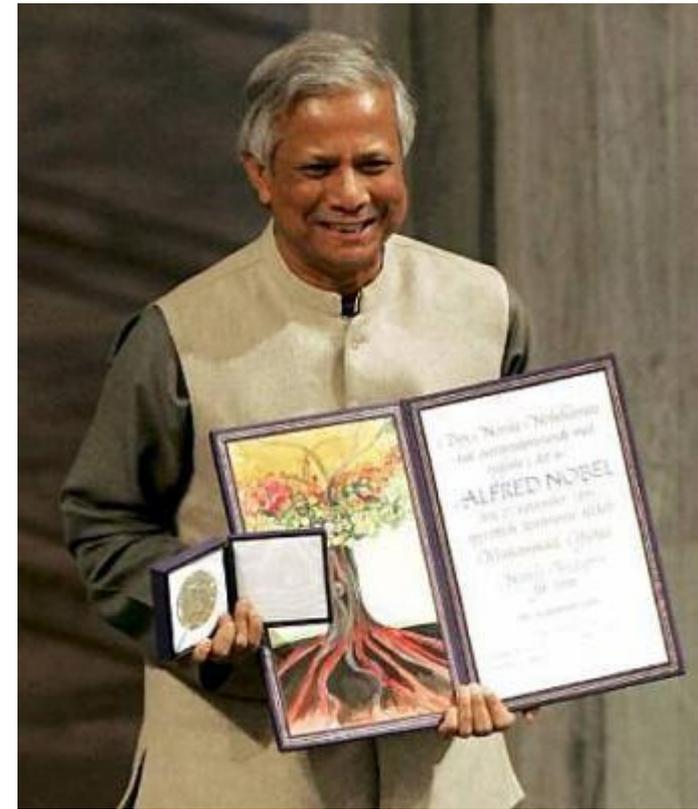




Grameen Bank



GrameenPhone





# Playing for water

- Appropriate technology



EDITED BY DAVID G. STORK  
FOREWORD BY ARTHUR C. CLARKE

# App Inventor labs

- GUIs
- Conditional statements
- Lists
- Procedure calls
- Global variables
- Games
- Sensors (orientation, acceleration, location)



# Final project assignment



## Build a helpful application

- App Inventor front end
- App Engine back end
- Presentation

# Final projects

- Radio station interface
- Apartment finder
- Flash card tool
- Oakland crime information
- Pregnancy information

Did this course change the way  
you think about CS?

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you think about CS?

*“Yes...I became more aware of its power to  
change the world with the help of brilliant  
minds.”*

[Child development major – weak programmer]

Did this course change the way  
you think about CS?

*“I already really liked it, and now I like it even more.”*

[English senior – weak programmer]

Did this course change the way  
you think about CS?

*“Yes, It is not just numbers.”*

[English senior – weak programmer]

Did this course change the way  
you think about CS?

*“Yes, I saw that computer science affects more  
people than I originally thought and is used in  
almost every field.”*

[Psychology senior – strong programmer]

# Discussion