# The Digital Age: So What?

PREPARED BY: DR. ROBERTO GALLARDO, LEADER MSUES INTELLIGENT COMMUNITY INSTITUTE WEB: ICI.MSUCARES.COM #THINKACTDIGITAL





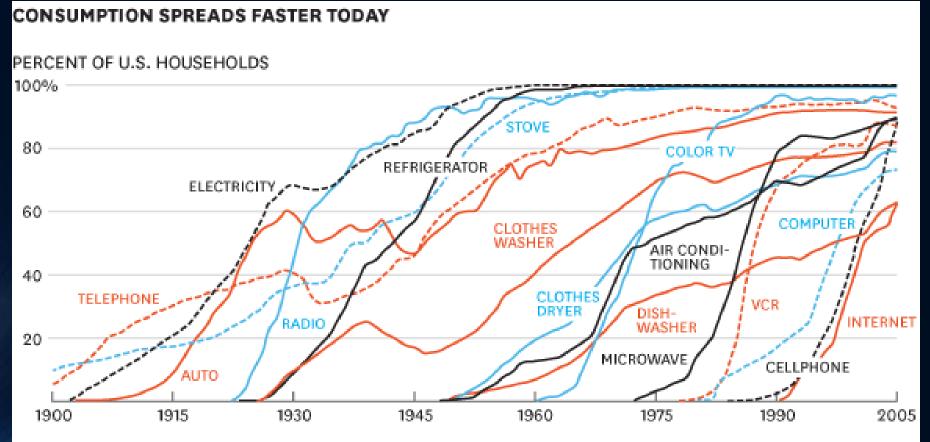
#### What's Ahead

- Digital Age stats
- Key concepts
- Intelligent Community
- So what?
- Where to start





### Technology is adopted faster ...



SOURCE MICHAEL FELTON, THE NEW YORK TIMES

ISTATE

**Community Institute** 

HBR.ORG

## Reaching 100 million users worldwide

- Telephone **75** years
- Mobile phone **16** years
- World Wide Web **7** years
- Facebook 4.5 years
- Instagram 2 years





Source: Twitter user @ValaAfshar; ITU; Statista; BCG Research

#### Worldwide every minute of 2013

#### 72 hrs. of videos uploaded to YouTube

\$83,000 Amazon online sales

48,000 apps downloaded (iTunes)



4 million Google search queries

> 204 million emails sent

Source: Domo



#### Real-time, huh?





Source: Twitter

## What's changed?



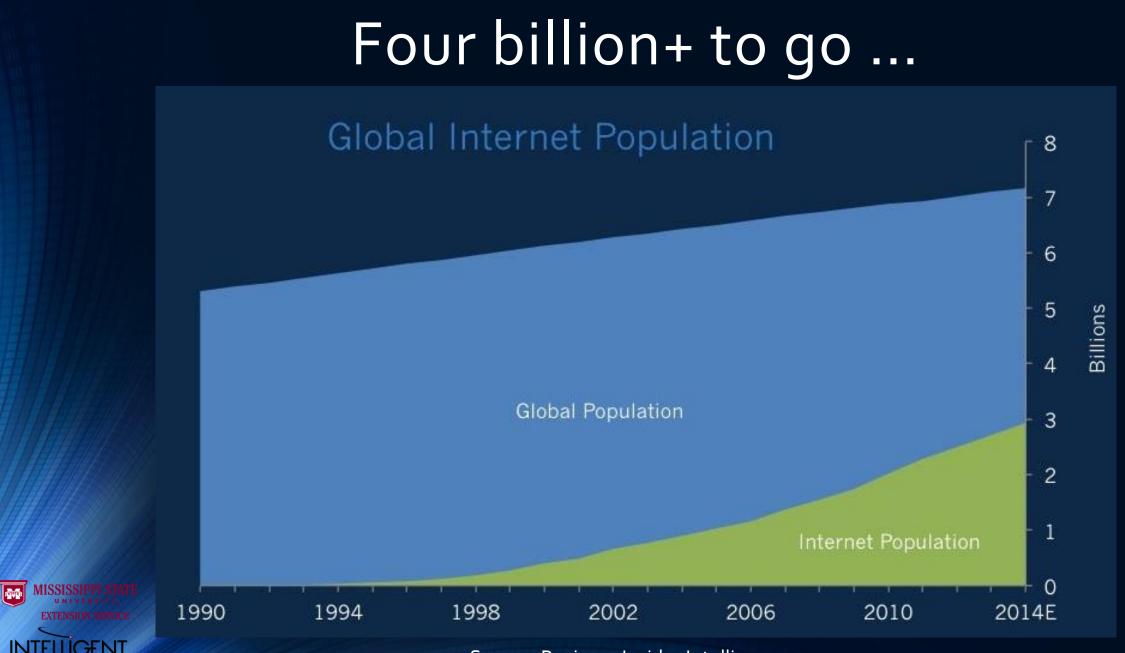




## The Digital Economy

- By 2016, will reach **\$4.2 trillion** in G-20 economies
- By 2020, will reach **\$6.6 trillion** in G-20 economies
- By 2016, will employ 32 million more people than in 2010
  Real threat to economic growth: digital divide





Community Institute

Source: Business Insider Intelligence

#### Key Concepts

- Internet of Everything (IoE)
- Second Machine Age
- Digital Disruption
- Digital Divide





## Exponential, huh?





Source: Twitter user @ValaAfshar

## Exponential, really?

#### If a VW 1971 beetle improved as did computer chips

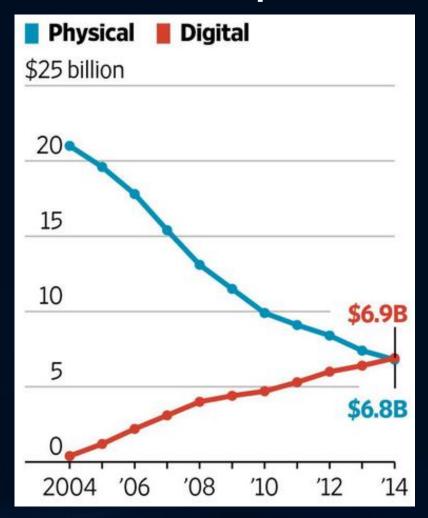


- Would reach **300,000 mph**
- 2 million mpg
- Would cost 4 cents



Source: Thomas Friedman, <u>New York Times</u>

#### This is what disruption looks like



Source: Wall Street Journal; International Federation of the Phonographic Industry (IFPI)

IFINE

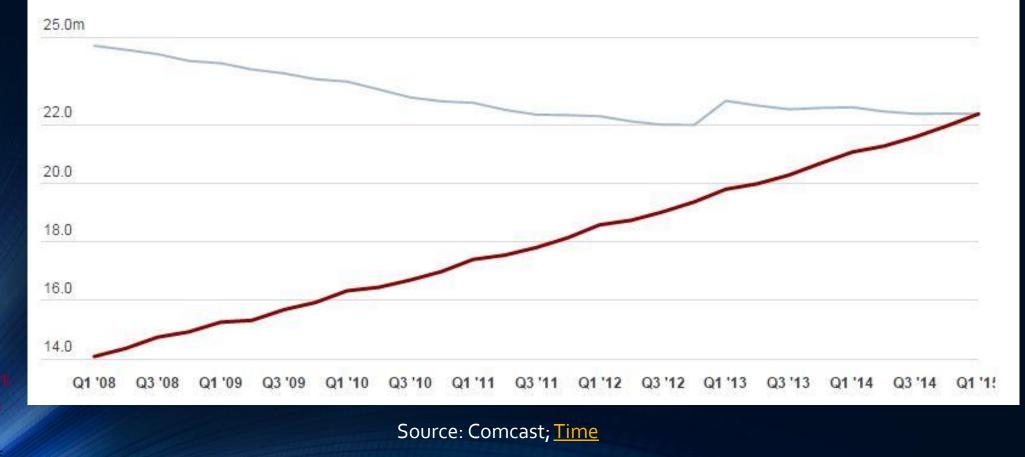
#### And this ...

IFINE

Community Institute 16

#### How Comcast's Business Is Changing

Comcast's number of Internet subscribers has exceeded the number of cable-TV (video) subscribers for the first time
Video Customers High-Speed Internet Customers



## Digital mindset, huh?





#### The Desk: Before & Today



Source: Harvard Innovation Lab

### What is an Intelligent Community?

"An intelligent community is one that – whether through crisis or foresight – **understands** the enormous challenges of the **digital age** and has taken **conscious** steps to **prosper** in it."

Source: Bell et al (2014). Brain Gain



#### Intelligent Community Indicators



ISTATER

#### Smart Vs. Intelligent

- Smart
  - Sensors
  - Reduce costs
- Intelligent
  - Proactive
  - Long-term







**EXTENSION SERVICE** 





## So What?

#### Do I *need* faster Internet?

Why would I want faster Internet?

... is like asking ...

Why do I want electricity when I already use candles?



#### Or, you can wait 39 years ...

0.49% of cc32e47	.exe Complet	ed		
000				
Saving: cc from ftp.netscap	e.com			
Estimated time left: Download to: Transfer rate:	39 years D:\Other Stuff 4,61 KB/Sec	8,89 MB of Downloads\	State of the second	a desta de la companya de la company
Close this dialog	alta desta			admant 1
	Open	Open	Folder	cāncel



#### Things to remember ...

- Digital age can level the playing field between urban and rural
- Size does not matter
- Eliminates "middle of nowhere"



 When most people can work anywhere, where will they choose to live and work?



#### How exactly does it work?

#### INNOVATORS

- Access to talent\*
- Networking opportunities\*
- Proximity to customers and suppliers\*

#### RURAL AREAS OFFER

- With connectivity
- Better air quality
- Natural amenities
- Less traffic



\*Source: Washington Post

#### Economic landscape shifting

#### INDUSTRIAL ECONOMY

- Geographic proximity
- The bigger, the better
- Tied to office, factory
- Big companies: employment concentration; collaborate

#### DIGITAL ECONOMY

- Disaggregation
- Economic gardening
- Work from anywhere
- Open innovation



### Digital age makes possible ...

- Access to research/education/funding
- Telecommuting/telework
- Visual communications (holograms)
- Telehealth & telemedicine
- Delight visitors & residents





#### Too good to be true?

- Not a silver-bullet
- Big brother
- Profitable privacy
- Inequality





Source: Keen, A. (2015) Internet is not the answer

### MSUES Intelligent Community Institute

- Mission: assist rural communities through outreach and research – transition to a digital mindset to build prosperous, inclusive, and sustainable communities
- Worldwide network: 2 additional Institutes
- Rural focus headquartered in Mississippi y'all!



#### **Contact Information**

Dr. Roberto Gallardo, Leader MSUES Intelligent Community Institute Website: <u>http://ici.msucares.com</u> Twitter: @robertoge Email: <u>roberto.gallardo@msstate.edu</u>



