## **INNOVATING RURAL:**



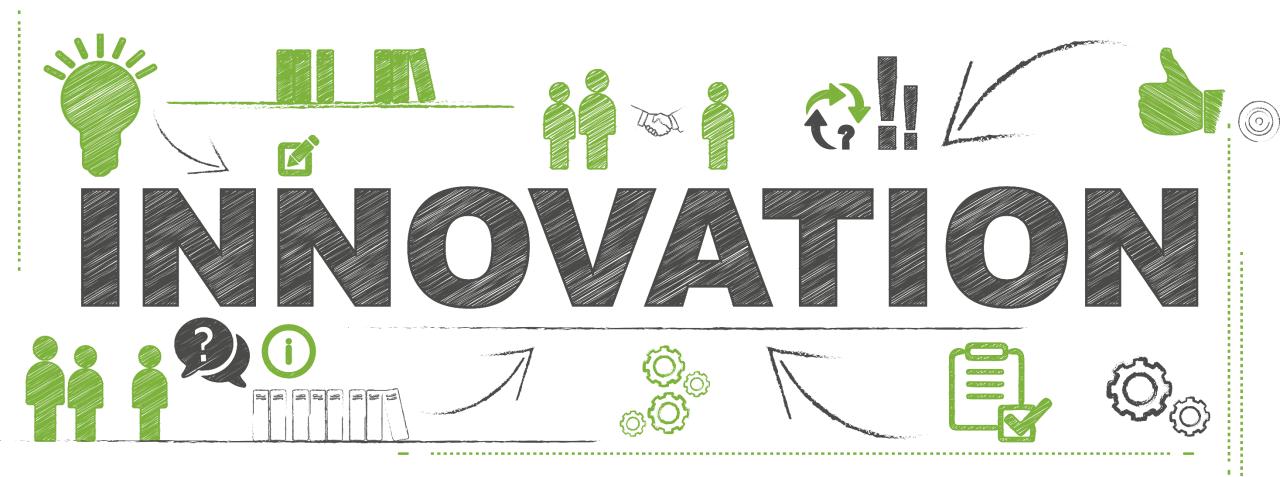
# BRIDGING THE DIVIDE OF DISTANCE & EXPERTISE

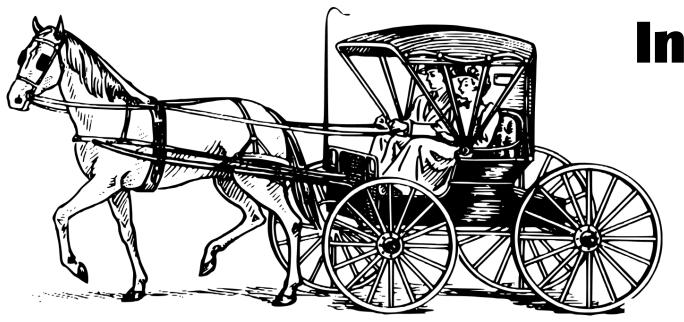
## Goals for today

- Some realities of the world today
- Where innovation trends are heading
- What is the gig economy?
- How does this change everything?
- Where does rural America stand?
- What can workforce and education do?
- Promising practices

As a society, we devalued farming as an occupation and encouraged the best students to leave the farm for 'better' jobs in the city. We emptied America's rural counties in order to supply workers to urban factories.

~ Michael Pollan





Innovation is tricky

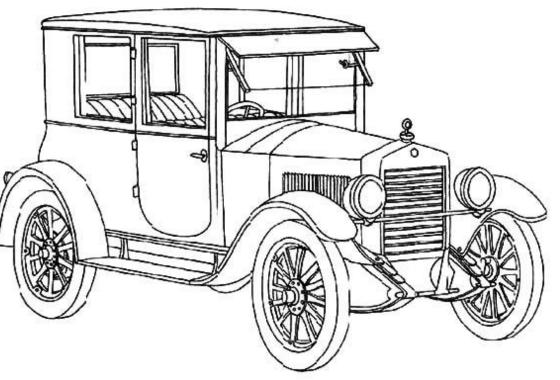
100 YEARS AGO, SOME PEOPLE WERE REALLY HOSTILE TO THE INTRODUCTION OF THE AUTOMOBILE OR "DEVIL WAGONS"

 No paved roads, gas stations, road signs, street maps, streetlights or traffic signals

Noisy and stirred up dust

• Threat to pedestrians, bicyclists, horses

- Max speed was 30mph
- Broke down frequently
- Expensive (\$825, or \$18,000 today)



## TECHNOL #GY





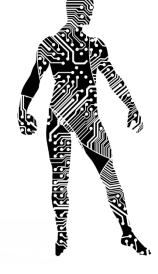




SCIENCE | TECHNOLOGY | ENGINEERING | MATHEMATICS







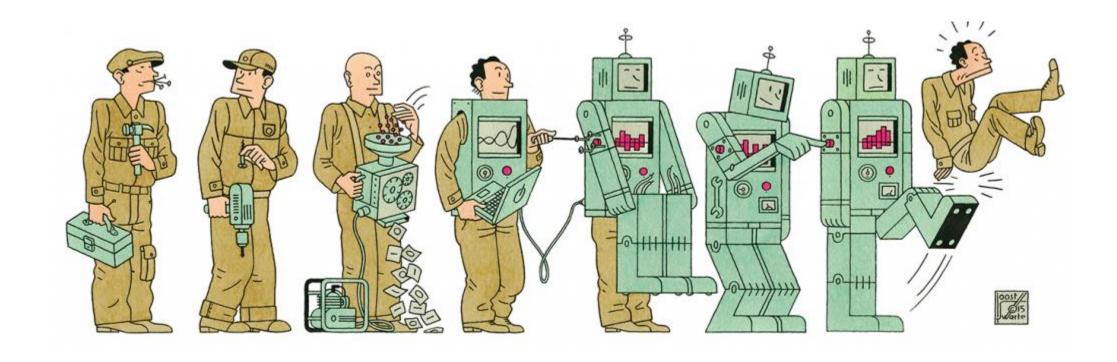




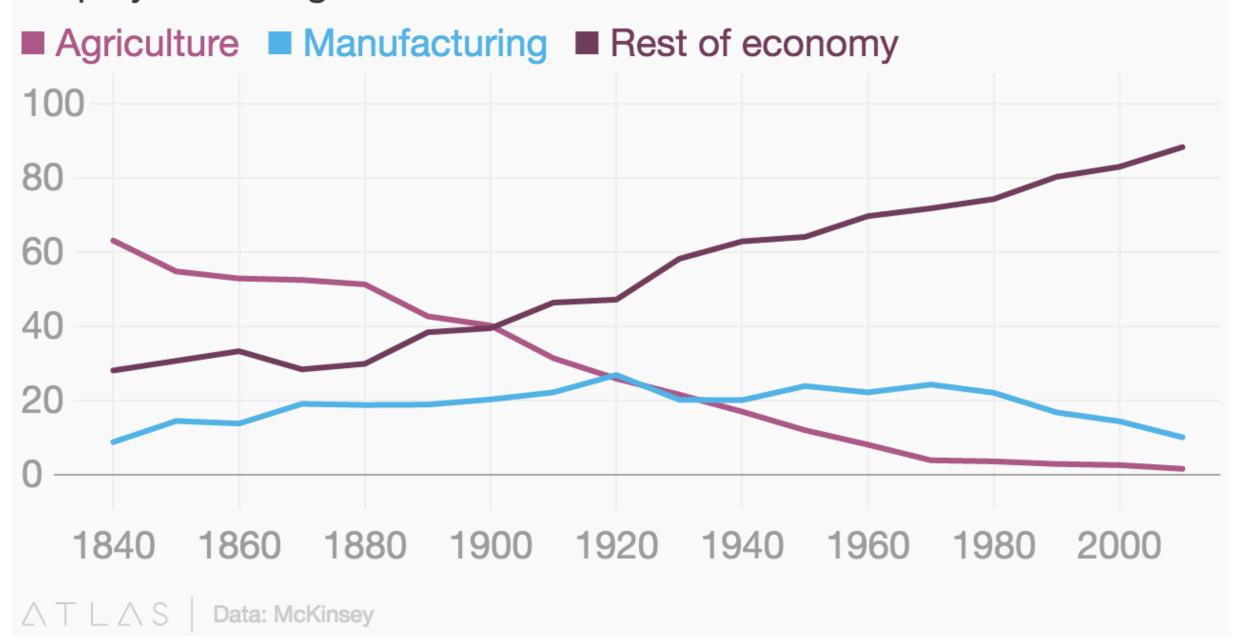
#### **SOCIAL MEDIA**

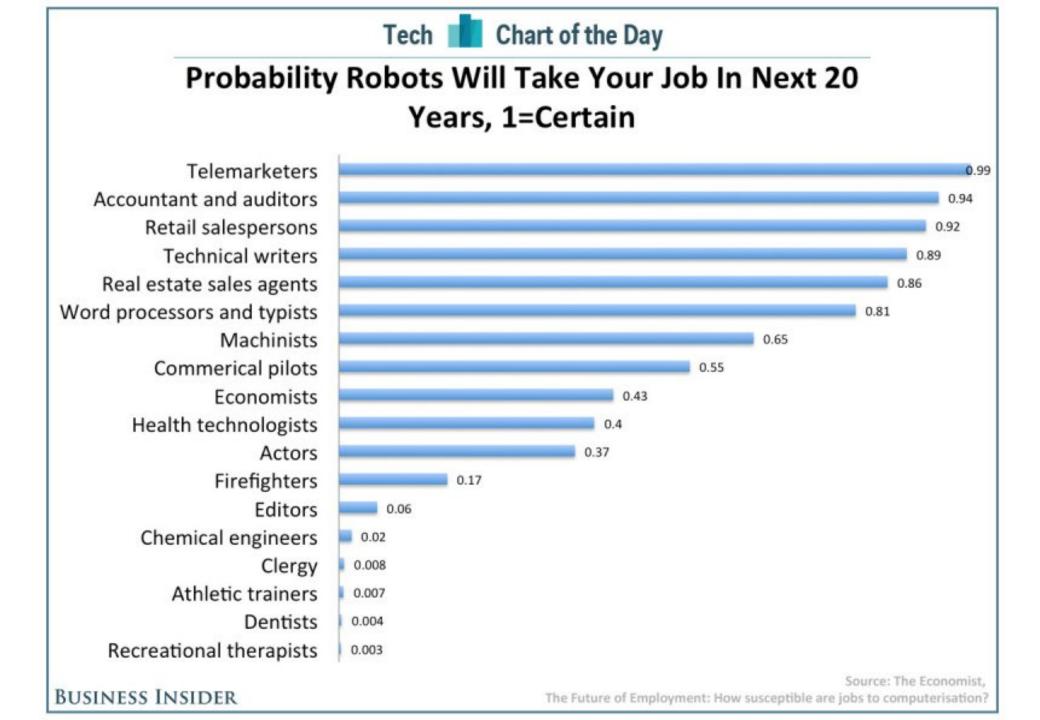


### A word on automation



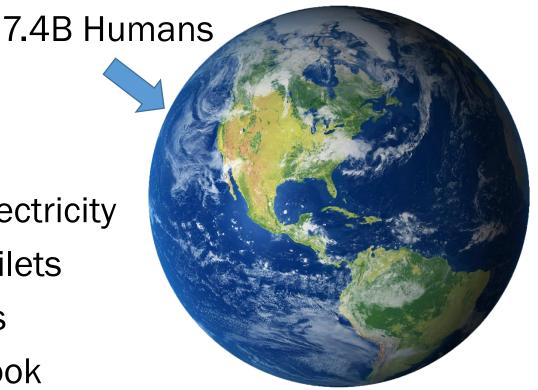
#### Employment in agriculture has fallen to less than 2% of workers





#### Some workforce realities

- Today = 1,300,000,000 people without electricity
- Today = 2,400,000,000 people without toilets
- Today = 7,600,000,000 active cell phones
- Today = 1,600,000,000 people on Facebook
- Today = 5,000,000,000 people entering the middle class
- Today = 45% of the world's workforce are contingent workers
- Today = 63,000,000 Americans (43% US workforce) work from home
- Today = 16,500,000 Virtual Reality VR headsets sold



## Some workforce predictions

By 2020, millennials with be 50% of the workforce.
 By 2025 they will be 75%

- By 2020, 50% of US workforce will be freelancers
- By **2020**, the size of Asia's middle class will be 3,200,000,000 (triple that in 2009)
- By **2025**, 4,000,000,000 people coming online
- By 2025, 1 in 3 jobs will be robo-replaced by 2025, displacing 140,000,000 workers
- By 2030, demand for energy and water is forecast to increase by as much as 50% and 40% respectively
- By **2030**, the UN projects that 4.9 billion people will be urban dwellers and, by **2050**, the world's urban population will have increased by some 72%

## We could be on the brink of the largest job creation period in humanity

- Location doesn't matter
- Work is competitive no one will pay just for a degree. Based on merit, not location
- % of college degrees on the rise (college = new high school)
- Informal education is valuable
- Crowdsource vs individuals
- On-demand vs 30 year pension
- The word "career" is as outdated as "typewriter"

Who is this workforce?



## A new generation

- 1. Motivated by meaningful work
- 2. Challenge Hierarchical Structures
- 3. Want a Relationship with Their Boss
- 4. Are Tech Savvy, To Say The Least
- 5. Are Open to Change
- 6. Are Task (Not Time) Oriented
- 7. Have a Hunger for Learning
- 8. Crave Constant Feedback
- 9. Want Recognition
- 10.(Don't Just) Want To Have Fun!



## So what is a GIG?





## Think of making a film

- Project based
- People with unique skillsets come together to produce an outcome
- Then they take their skills to the next project.
- Workers have portfolios rather than resumes
- Virtual teams across time, space and organizational boundaries to collaborate using technology
- Networks and connections in the industry are vital to getting hired



## TOP 10 FASTEST GROWING FREELANCE OPPORTUNITIES

PowerPoint Creation 35.4% +

Accounting 23.3% +

Report Writing 20.5%+

Illustration 19.9%+

Photoshop Design 19.4%+

3D Rendering 17.3%

Facebook Marketing 16%+

Sales 14.8%+

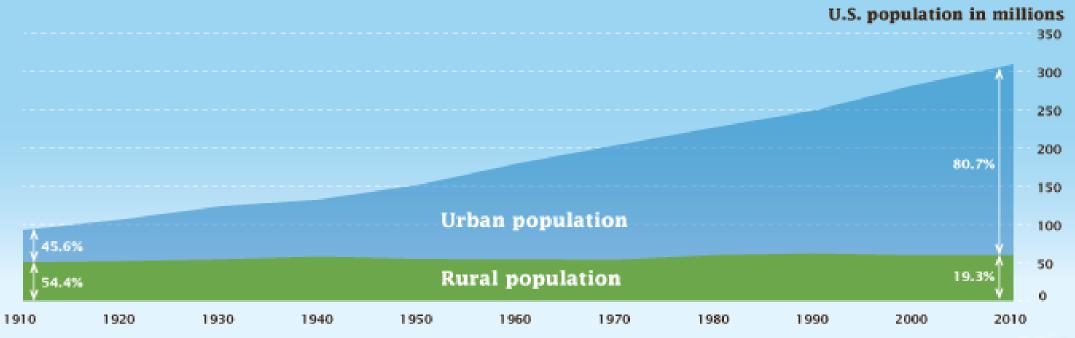
Android Development 14.8%

eBay Auctions (listings & fulfillment) 16.2%+





#### Change in Rural and Urban Population Size: 1910-2010



Source: U.S. Census Bureau, 1910 to 1990 Censuses, <www.census.gov/population/censusdata/urpop0090.txt>; 2000 Census, Table P002; 2010 Census, Table P2.



## Symptoms of Rural Poverty Barriers to Upward Mobility

- Drug & alcohol use
- Mental health issues
- Low wages (no wealth)
- Huge wealth disparities
- Lack of skilled workforce
- Rampant nepotism
- Limited educational opportunities
- Limited access to broadband
- Limited expertise
- Limited activities for young people



- Limited access to health care
- Limited local businesses (dying main streets)
- Limited voting impact (ability to design laws)
- Exportation of wealth (banks)
- Exportation of natural resources
- Food deserts
  - Traditional (manual) work

#### What can rural communities do?

#### **CONS**

- Insufficient infrastructure
- Inconsistent broadband
- Distance from transportation
- Limited direct access to consumers Underutilized infrastructure
- Legacy industries will not return
- Aging populations
- Lack of youth culture
- Limited capital

#### **PROS**

- People can live and work anywhere
- Increased quality of life
- Plenty of room (mostly)
- Abundant natural resources
- Innovation space for vital industries (agriculture, manufacturing)
- Ease of testing new strategies



## Rural revitalization strategies

Get people together around a common vision

Asset Based Community Development (ABCD)

- Prioritize business creation
  - visible innovation spaces
  - organized mentor groups
  - angel or seed investments
  - workshops and pub talks
- Collective action (in everyone's strategic plan)
- Organize and lobby the state for more resources
- Seek out philanthropy
- Good old fashioned barn raising





#### What can Adult Education do?



#### **Community Colleges...**

- Recognize that small businesses are asking for new-hire soft skills training
- Understand that the entrepreneurial mindset teaches soft skills
- Support the infusion of entrepreneurial skills for students across all programs
- Provide real-world experiential learning to reinforce technical and soft skills training

Technical skill + "soft skills"+ experience = high value

## Real world learning

- Critical thinking
- Problem solving/troubleshooting
- Emotional intelligence
- Soft skills/marketing
- Design thinking

- Coding and machine learning
- Process management
- Economics and business
- The entrepreneur mindset
- Networking/Teambuilding

### **CAREER & TECHNICAL EDUCATION**



## **Promising Practices**

- Solopreneur and entrepreneurship curriculum
- Focus on GIG economy industries
- Areas of excellence based on community strengths
- Industry partnerships, apprenticeships
- "No wrong door" strategies
  - Common diplomas
  - Distance learning
- Involve professionals in teaching
- Share and ask
- Don't re-invent the wheel



## **Examples**

- Yreka Enactus "SIFE"
  - Students in Free Enterprise
- McCloud Graphic Design Curriculum
- AEBG Partners
  - Mountain Medics, Black Fox Forestry,
  - First 5 Siskiyou, Siskiyou County Libraries
- Community Pro Suite







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