

Jobs on the Move



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January 2017

Overview

- The New Normal
- Three Waves of Economic Globalization
- Global Economic Recession, Offshoring, & Reshoring
- Robotic Outsourcing & The Freelance Economy
- Questions to Ponder

Turbulent Times

- 9/11 Terrorist Attacks
- Public Health Risks
- Gulf Coast Natural Disasters
- U.S. Housing, Finance, & Credit Crises
- Earthquakes in Haiti, Chile, & China
- BP Oil Disaster
- Earthquake, Tsunami, Nuclear Reactor Crisis in Japan
- Global Economic Recession
- North Korea Crisis
- Ebola Outbreak
- The Ukraine Crisis
- Islamic State of Iraq & Syria (ISIS)
- European Union Refugee Crisis

Turbulent Times Cont'd

- Terrorist Acts—Domestic & International
- Police Shootings
- Police Killings
- Baton Rouge, Louisiana Disaster
- Recent Presidential Election Cycle—
politics in the post-truth era.

**“Certain-Uncertainty”
is the New Normal!**

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**The World of Working
is Changing**

The New World of Work

- Outsourcing
- Offshoring
- Robotic Outsourcing
- Reshoring/Backshoring
- Freelancing & the “Gig” economy



AVERAGE SHARE OF LONG-TERM UNEMPLOYMENT BY EDUCATION

Education	1990-1993	2001-2004	% Change
Less Than High School	24.7%	23.7%	-1.0
High School Graduate	40.6%	34.3%	-6.3
Some College	20.7%	24.4%	3.7
Bachelor's Degree or More	14.0%	17.6%	3.6

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AVERAGE SHARE OF LONG-TERM UNEMPLOYMENT BY OCCUPATION

Occupation	1990-1993	2001-2004	% Change
Blue Collar	40.5%	31.6%	-8.9
Service Occupation	14.3%	16.7%	2.4
White Collar	38.5%	44.4%	5.9

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THE LONG-TERM UNEMPLOYED, 2009

PROFESSION	% OF ALL JOBLESS WORKERS
Architecture & Engineering	41.2
Management	39.0
Community & Social Services Occupations	36.1
Installation, Maintenance & Repair Work	34.9
Production Occupations	33.4

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BACHELOR'S DEGREE HOLDERS (UNDER AGE 25) WHO WERE JOBLESS OR UNDEREMPLOYED

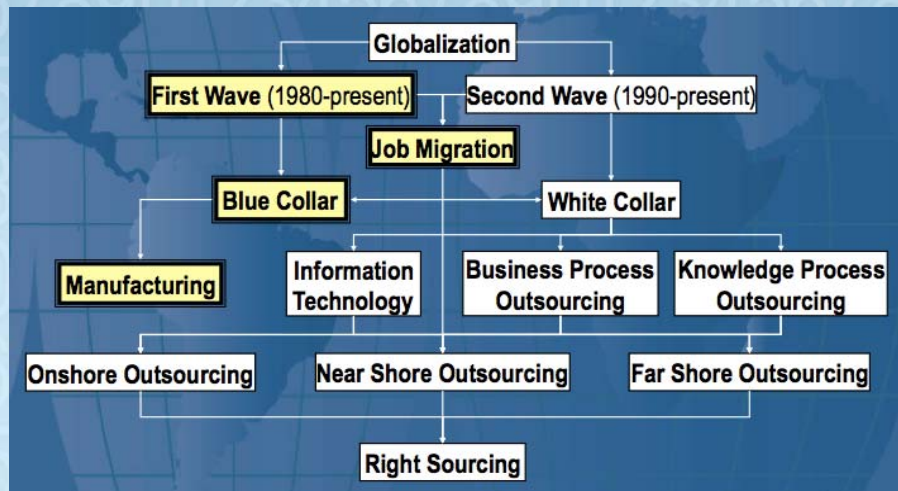
Year	Percent
2000	41.0
2011	53.6

Economic Globalization

The increasing tendency for goods and services consumed in the U.S. to be produced offshore in countries like Mexico, India, and China.



Globalization's Impact on The American Worker



Concerns about First Wave of Globalization

Joe Smith started the day early, having set his alarm clock (MADE IN JAPAN) for 6 a.m. While his coffeepot (MADE IN CHINA) was perking, he shaved with his electric razor (MADE IN HONG KONG). He put on a dress shirt (MADE IN SRI LANKA), designer jeans (MADE IN SINGAPORE) and tennis shoes (MADE IN KOREA).

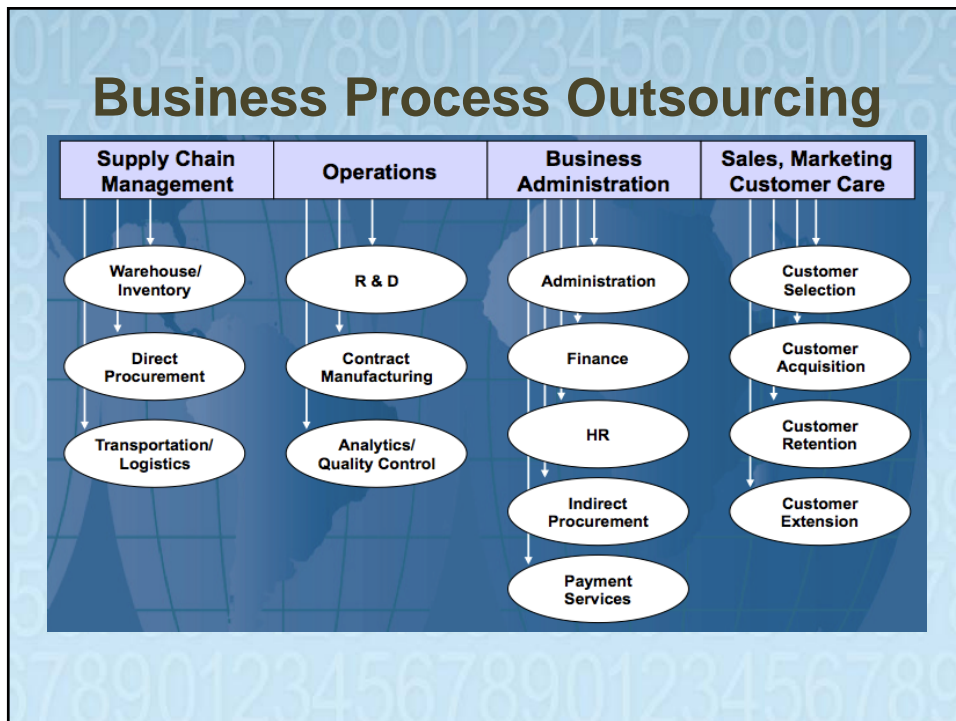
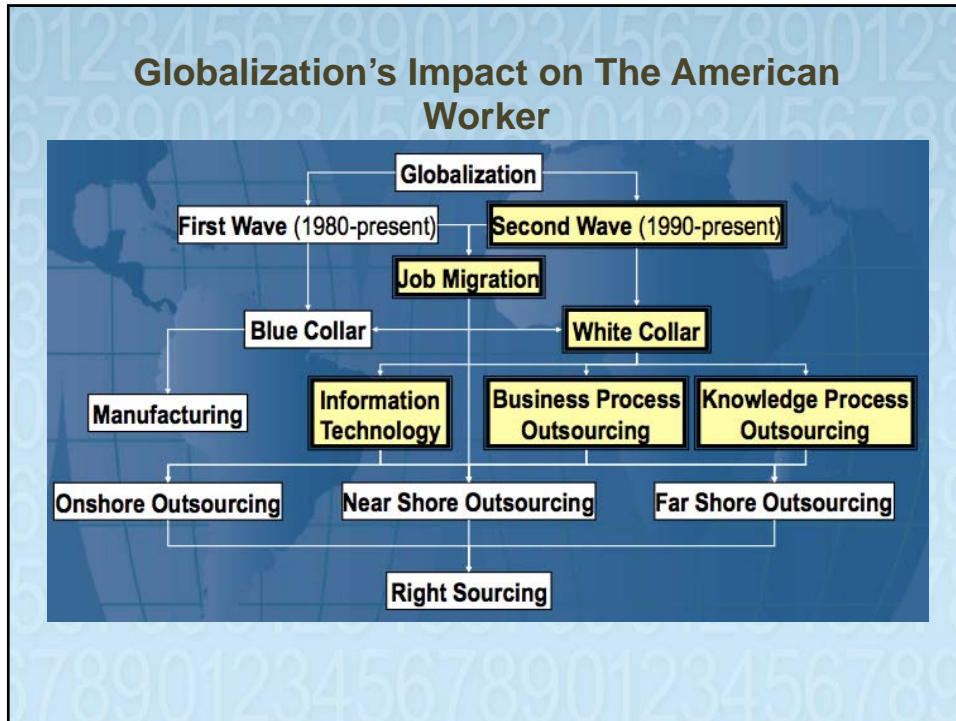
After cooking his breakfast in his new electric skillet (MADE IN INDIA), he sat down with his calculator (MADE IN MEXICO) to see how much he could spend today. After setting his watch (MADE IN TAIWAN) to the radio (MADE IN INDIA) he got in his car (MADE IN JAPAN) and continued his search for a good paying AMERICAN JOB.

At the end of yet another discouraging and fruitless day, Joe decided to relax for a while.

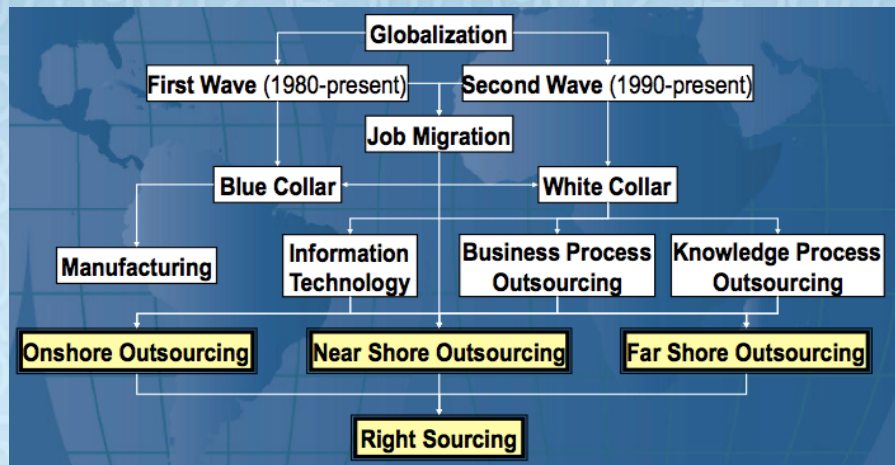
He put on his sandals (MADE IN BRAZIL) poured himself a glass of wine (MADE IN FRANCE) and turned on his TV (MADE IN INDONESIA), and then wondered why he can't find a good paying job in.....AMERICA.

U.S. Manufacturing Employment Change

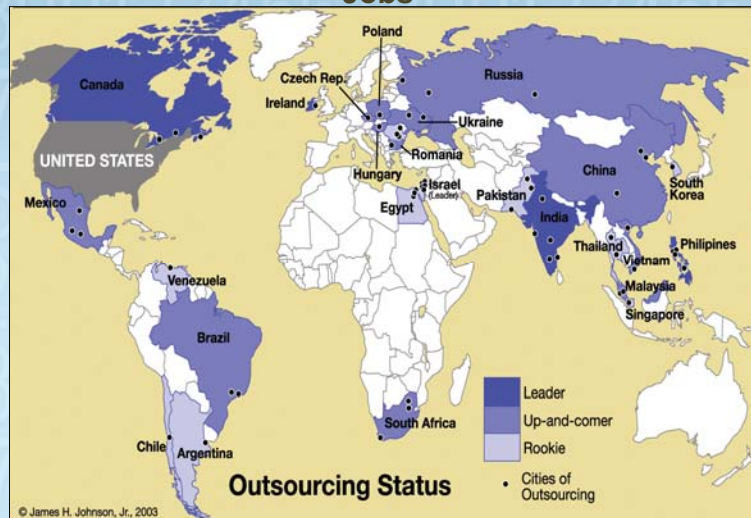
Date	Number of Jobs
June, 1979	19,553,000
April, 2015	12,322,000
Difference	-7,231,000
Percent Change	-37%

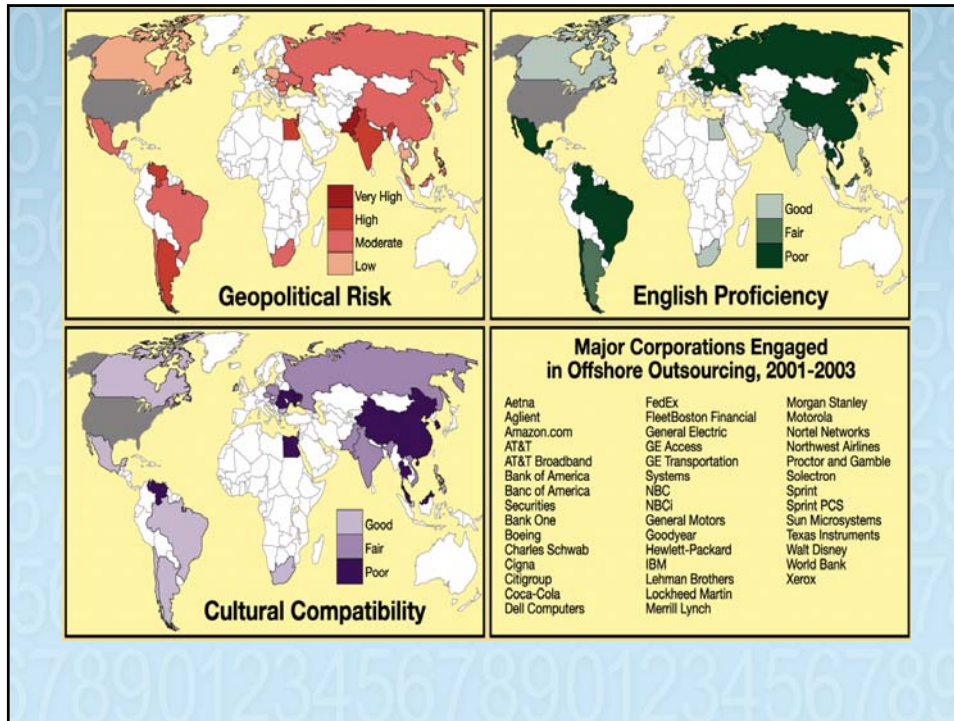


Globalization's Impact on The American Worker



The Geography of Offshore Outsourcing of White Collar Jobs





White Collar Jobs Projected to Move Offshore

PROFESSION	# by 2005	# by 2010	# by 2015
Architecture	32,000	83,000	184,000
Business Operations	61,000	162,000	348,000
Computer Sciences	109,000	277,000	473,000
Law	14,000	35,000	75,000
Life Sciences	3,700	14,000	37,000
Management	37,000	118,000	288,000
Total	256,700	689,000	1,405,000

U.S. Employment in Occupations at Risk to Outsourcing

SECTOR	Employment (2001)
Office Support	8,637,900
Business and Financial Support	2,153,480
Computer and Math Professions	2,825,870
Paralegals and Assistants	183,550
Diagnostic Support Services	168,240
Medical Transcriptions	94,090
Total in Outsourcing Risk Occupations	14,063,130
All Occupations (Total U.S. Employment)	127,980,410
% of All Occupations at Risk	11.0%

Globalization's Impact on U.S. White Collar Workers

At the top of his white-collar game, Jim Brannon worried little about his job. He was six-figure successful, an educated man with a jet-setting software job in Norcross (GA). The vagaries of free trade and globalization couldn't touch him. He was, after all, a vaunted executive at Unisys, the world-spanning information technology behemoth. It was the blue-collar Joe, Brannon believed, who'd wake up on morning and discover his factory job had gone to Mexico or China.

Globalization's Impact on U.S. White Collar Workers (cont'd)

Brannon, though, experienced just such a morning in February 2002. A letter ordered him to clear out his desk by day's end. Gone were the fancy office, expense account, feeling of invincibility, and once-solid belief in the righteousness of Corporate America.

Brannon, now 52, represents one of the hundreds of thousands of American white-collar workers whose jobs have disappeared the last three years. While Unisys' desire to cut costs was partly to blame for Brannon's unemployment, he says a major culprit was offshore outsourcing."

Challenges to the Nation's Innovation Capacity

- Competitive landscape is changing
- Immigrants have driven innovation in our economy
- U.S.-based firms are outsourcing innovation
- Talent is cheaper offshore

GE Research & Development Facilities

Location	Year Founded	Number of Employees	Focus Area(s)
Niskayuna (NY), USA	1900	2,000	All
Bangalore, India	2000	5,000	All
Shanghai, China	2000	1,500	All
Munich, Germany	2003	250	All
Tirat Carmel, Israel	2011	6	Health Care, Energy, Software Analytics+
Van Buren (MI), USA	2011	N/A	Aviation
Rio de Janeiro, Brazil	2011	160	Bioenergy and Offshore Subsea Systems +
Oklahoma City (OK), USA	2013	85	Oil and Gas
Dhahran, Saudi Arabia	2015	15	Materials Characterizations +

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Economics of Offshore Outsourcing

Job	US Worker	Offshore Worker
Architect	\$3,000+/month	\$250/month
Accountant	\$5,000+/month	\$300/month
Financial Analyst	\$7,000+/month	\$1,000/month
Chip Designer	\$7,000/month	\$1,000/month
Aerospace Engineer	\$6,000/month	\$650/month
Info-Tech Support	\$10,000/month	\$500/month

Qualified Workers Available, per year, and Hourly Wages, Selected Offshore Locations

Mumbai India	Manila Philippines	Kuala Lumpur Malaysia	Shanghai China
CUSTOMER CALL CENTER			
35,000-45,000 \$1.50/hr	9,000-11,000 \$1.47/hr	6,000-7,000 \$2.19/hr	6,000-7,000 \$2.50/hr
BACK-OFFICE FINANCE AND ACCOUNTING			
14,000-17,000 \$1.35/hr	9,000-11,000 \$1.73/hr	7,000-9,000 \$1.86/hr	12,000-15,000 \$2.03/hr
ELECTRONIC DOCUMENT CONVERSION			
111,000-140,000 70 cents - \$1/hr	11,000-14,000 \$1.07/hr	20,000-25,000 \$1.47/hr	18,000-23,000 \$1.50/hr

Straddling Two Continents and Cultures: Indian Call Center Workers

INDIAN NAME	AMERICAN NAME
Jayanti	Jessie
Madhuri	Nicole
Mahesh	Murphy
Randhir	Randy

Outsourcing Trends In Health Care Industry

- Administrative Services
- Information Technology
- Revenue Cycle Functions
- Insurance Claims Processing
- Medical Transcription
- Virtual Practice Management
- Telemarketing Activities
- Fulfillment Services

Outsourcing Trends In Health Care Industry

- Patient Care Services
- Tele-radiology Services
- Pre-Servicing Nursing
- Intensive Care Unit Monitoring
- Medical Tourism

Medical Tourism Cost Comparison

Type	U.S.	India
Hip Replacement (partial)	\$18,000	\$4,500
Hip Replacement (full)	\$39,000	\$3,000
Orthopedic surgery	\$18,000	\$4,500
Cardiac surgery	\$40,000	\$6,500
Gall bladder surgery	\$60,000	\$7,500

U.S. – Based Multinationals Forging Relationships with Foreign Governments & Universities

COMPANY	RELATIONSHIP
Hewlett Packard	University of Beijing
Intel	China and Germany
IBM Collaborations	Saudi Arabia Switzerland China Ireland Taiwan India

Anticipated Impact of White Collar Job Shifts on American Society

In the years ahead, sizable numbers of skilled, reasonably well-educated middle-income workers in service-sector jobs long considered safe from foreign trade—accounting, law, financial and risk management, health care and information technology, to name a few—could be facing layoffs or serious wage pressure as developing nations perform increasingly sophisticated offshore work. The shift portends dramatic realignment of wealth over the next couple of generations—valued ... at “hundreds of billions of dollars.”

Reverse Outsourcing

Company	U.S. Based Employees
Tata Group	19,000
Essar	7,200
WIPRO	8,000
Satyan Computers	5,000
ITCL Technologies	3,000
Ranbaxy	600

Backshoring/Reshoring to the U.S.

- Economic and public relations pressures (Delta Airlines, Sallie Mae, JPMorgan, AT&T).
- Obama Administration policies discourage offshore outsourcing.
- Satyam scandal (India's Enron)
- Mumbai firm attacks.
- Trump's "Make America Great Again" Campaign (Carrier & Ford)

Reshoring Manufacturing—Drivers

- Higher Transportation & Fuel Costs
- Higher Wage Rates
- Higher Rejection Rates

Reshoring Manufacturing—Advantages

- Reduce Inventories
- Reduce lead-times
- Improve quality & reduce variability
- Reduce chaos and hassles
- Speed-up innovation
- Reduce red tape, regulatory compliance risks, and total costs

Robotic Outsourcing

- Advances in Machine Learning & Mobile Robotics
- First, simple, routine, basic tasks
- Now, dynamic problem solving
- Not only blue-collar but also white collar jobs at risk

Probability of Job Loss Due to Computerization (1= certain)

Job	Probability	Job	Probability
Recreational Therapists	0.003	Economists	0.43
Dentist	0.004	Commercial Pilots	0.55
Athletic Trainers	0.007	Machinists	0.65
Clergy	0.008	Word processors & typists	0.81
Chemical Engineers	0.02	Real estate agents	0.86
Editors	0.06	Technical writers	0.89
Firefighters	0.17	Retail salespersons	0.92
Actors	0.37	Accountants & auditors	0.94
Health Technologists	0.04	Telemarketers	0.99

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Humans Need Not Apply

- www.youtube.com/watch?v=7Pq-S557XQU

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The Third Wave

We are entering the Human Age where *inner human potential* will be the primary driver of innovations in our economy and of all major advances in our lives.

Jeffrey A. Joerres, Chairman & CEO
Manpower Group

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Third Wave Cont'd

Distinguishing the Third Wave from earlier waves, Joerres goes on to state:

Previous eras were defined first by raw material our ancestors bent to their will—stone, iron, and bronze; then they were characterized by the domains people conquered with ever improving technology—industry, space, and information. *Now, it will be human potential itself that will be the catalyst for change and the global driving force—economically, politically, and socially* (emphasis added).

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Drivers

- Broadband Technology
- Cloud Computing
- Other Technological Innovations
- Disruptive Demographics
- Global Economic Recession

The Online Market Place

- Guru.com
- Upwork.com (formerly Elance-odesk.com)
- Freelancer.com
- HourlyNerd.com
- Fiverr.com

Upwork.com

Registered Freelancers	9 million
Worth of Work Done Annually	\$1 billion
Jobs Posted Annually	3 million
Registered Clients	4 million

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THE COMPETITIVE TOOL KIT

- Analytical Reasoning
- Entrepreneurial Acumen
- Contextual Intelligence
- Soft Skills/Cultural Elasticity
- Agility and Flexibility

Moving Forward

- Embrace Immigrants
- Promote Encore Entrepreneurship
- Pursue Age-Friendly Community Economic Development
- Rebrand Public Education around the Competitive Tool Kit
- Incentivize Migration

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THE END

