Faster, Smarter, Stronger:
Getting Over Your Data Fears &
Getting a Grip on Hiring Trends

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Tennessee SHRM 2017

Agenda

• U.S. Labor Market Outlook
• The Changing Nature of Work
• The Economics of Talent Acquisition

Warm-Up: Polling Question

Are you satisfied with your own ability to understand labor market trends?
Warm-Up: Polling Question

What proportion of your hiring managers do you think are satisfied with their own ability to understand labor market trends?

My Background

iCIMS, Inc.
- Analysis of U.S. labor markets and hiring trends
- Building novel labor market indicators

Previously at:
- Bloomberg – macroeconomic analysis, novel economic indicators, frequent commentator on Bloomberg Radio and Bloomberg TV.
- The Federal Reserve – financial crisis response, research, and policy advising across the legislative and executive branches of the federal government.

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U.S. Labor Market Outlook (1/3)
U.S. Growth

U.S. Real GDP per capita

Source: BEA

Average Annual Real Growth Rate.

Source: BEA

A Long-Lived But Lackluster Recovery

Strong Growth in Payrolls

3-Month Average Breakeven Rate

Source: BLS
High Hopes for 2017

Growth Outlook & Recession Risk

Engines of Growth
Household Balance Sheets Look Healthier

... But New Vulnerabilities Lurk

Lynchpin to the Outlook
Another Look at Job Growth

Strong Growth in Payrolls

Source: BLS

Full Employment?

Unemployment Rate vs Sustainable Rate

Source: BLS

Pool of Officially “Unemployed”

Unemployed Worker / Vacancy

Source: BLS
More Openings / Unemployed

Beveridge Curve

Openings (millions)

Unemployment (millions)

Source: BLS

Wage Growth: Still Moderate

Year-Over-Year Change

Average Hourly Earnings
Employment Cost Index

Source: BLS

Demographics

Employment / Population Ratio

Source: BLS
Demographics

U.S. Labor Force Participation Rate

- LFPR

Source: BLS

Dwindling Slack

- Under-employment (ls)
- Unemployment (rs)

Source: BLS

The Changing Nature of Work

(2/3)
Contingent Work & the Gig Economy

Google Search Interest Relative to Peak

- "gig economy"
- "sharing economy"

Source: Google Trends

Contingent Work: Temps

Temp Work as % of Payrolls

Source: BLS

Contingent Work: New BLS Survey

- First survey by BLS since 2005.
- Conducted May 2017
- Results expected late 2017 or early 2018.
- How many questions do you think they have added?
Contingent Work: Taxonomies

| Share of working-age population engaged in independent work |
|-----------------|-----------------|
| **Preferred Choice** | **Supplemental Income** |
| Free agents 30% | Casual earners 40% |
| 40 million | 64 million |
| Reluctants 14% | Financially strapped |
| 21 million | 26 million |

Source: 2016 McKinsey Global Institute survey of ~8,000 US and European respondents

Contingent Work: Taxonomies

- Employers
  - Temp Agencies
  - Contracting Firms
  - Independent Contractors
  - Solo Freelancers
  - Mobile-Enabled
  - Brokers
  - Marketplaces

Flexibility vs. Unpredictability

Managing the unpredictability of contingent work

- Hybrid status: “dependent contractors”
- Portable benefits
- Encourage saving
- Better labeling: breadwinning vs. supplementary
Other Shifts: Industry Composition

Shifting Industries

Source: BLS
Shifting Occupations

Production occupations are more likely to be at risk
Source: BLS projections

Source: iCIMS Inc.

Shifting Occupations

Source: BLS projections

iCIMS Hiring Data

3,500+ Customers

2.3 million Jobs per Year
32.2 million Applicants per Year

Real-time & granular
Full life-cycle of applying and hiring
iCIMS Data: Breaking It Down

HR Metrics
- Time-to-Fill
- Talent Supply and Demand

BLS-like Data
- Hires
- Fills

Details by:

Industry
- Manufacturing
- Trade, Transport & Utilities
- Retail Trade
- Professional & Business Services
- Finance
- Information
- Healthcare & Social Assistance
- Leisure & Hospitality
- Other Services

Occupation Type
- Engineers & Scientists
- Food Preparation
- Maintenance & Repair
- Arts & Design
- Healthcare Workers
- Education
- Legal
- Sales
- et al.

iCIMS Data: Monthly Hiring Indicator

Nationwide Growth
- 4% Hires
- 6% Openings

Details by Industry
- -3% Healthcare & Social Assistance
- 9% Retail Trade

Details by Location
- 0.4% West Region
- 13% Chicago

iCIMS Data: Growth in Hires

Growth in Hires

[Graph showing growth in hires from March 2015 to September 2016 for full-time, not full-time, and part-time positions.]

Source: iCIMS
iCIMS Data: Occupations

**Healthcare & Social Services**
- Technical Healthcare: 14%
- Healthcare Support: 6%
- Management & Administration: 17%
- Community and Social Service: 20%

**Retail Trade**
- Sales and Related Occupations: 24%
- Management & Administration: 14%
- Other: 62%

**Manufacturing**
- Production Occupations: 43%
- Management & Administration: 16%
- Other: 20%

**Professional & Business Services**
- Management & Administration: 48%
- Other: 42%

**“Other” Occupations**
- Arts, Design, Entertainment, Sports, & Media: 9%
- Computer & Mathematics: 9%
- Installation, Maintenance, & Repair: 8%
- Architecture & Engineering: 7%
- Business & Financial Operations: 6%
- Production Occupations: 5%
- Healthcare Support: 3%
- Production: 3%
- Food Preparation & Serving Related: 2%
- Sales & Related Occupations: 2%
- Protective Services: 2%
- Business & Financial Operations: 2%
Skills Gaps?

The Economics of Talent Acquisition (3/3)

The Technologization of TA
Technologization of TA vs. Other Industries

**E-Commerce**
- Financial Markets
- Short-Term Housing

**Online marketplaces**
- Efficiency
- Price transparency
- High-volume, often short-term

**Household Tasks**
- Crafts
- Ride sharing

**Online House Hunting**
- High-stakes, long-term decisions
- Highly complex valuation
- Intuition: human element remains irreplaceable

**Online Dating**

Labor: Supply + Demand ≠ Price

**Job Opening Rate vs. Earnings**

- Finance & Information
- Professional & Business
- Health Care
- Accommodation & Food
- Retail
- Manufacturing
- Construction
- Retail
- Finance & Information
- Professional & Business
- Health Care
- Accommodation & Food
- Retail
- Finance & Information
- Professional & Business
- Health Care
- Accommodation & Food
- Retail
- Finance & Information
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- Finance & Information
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- Accommodation & Food
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Labor: Supply + Demand ≠ Price

Job Turnover vs. Earnings

Matching Markets

“Matching” means selection based on other criteria, in addition to or instead of price.

<table>
<thead>
<tr>
<th>Price Alone</th>
<th>No Prices</th>
<th>“Prices Plus”</th>
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</thead>
<tbody>
<tr>
<td>Wheat &amp; Oil</td>
<td>Organ Donation</td>
<td>Housing</td>
</tr>
<tr>
<td>Stocks &amp; Bonds</td>
<td>Public Schools</td>
<td>Residency Match</td>
</tr>
<tr>
<td>Any Commodity</td>
<td>Online Dating</td>
<td>Jobs</td>
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</tbody>
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Matching Markets

To be successful, markets must be:

- Thick
- Uncongested
- Safe
Matching Markets

**Thick**
You won’t go to the market if it doesn’t offer a good selection of products and vendors.

Matching Markets

**Uncongested**
You won’t stay at the market if you can’t get served quickly enough.

Matching Markets

**Safe**
You won’t be honest about your true preferences unless it is safe to do so.
Matching & Matchmaking

Solution?

Set up the right intermediaries who can:
1) Attract enough buyers and sellers,
2) Give them enough confidence to share information,
3) Organize that information, and
4) Match buyers and sellers.

Artificial Intelligence is Hot...

... But Prediction is Hard
Artificial Intelligence or Intelligent Artifice?

Questions?

Thank you!