Outline

- Why distribution matters
- Where the impact might be
- Whose jobs are more at risk
- The bigger picture
Why distribution matters

- We don’t know how technology will change work …
- … but we know the impact will be uneven
“Routine” jobs

- *Can be accomplished following explicit rules*
  - Indicator of automation potential

- **Routine job sectors**
  - Sales and office
  - Natural resource, construction, and maintenance
  - Production, transportation, and material-moving

- **Non-routine job sectors**
  - Management, business, science, arts
  - Service
  - (includes healthcare)
Where the impact might be
What Californians do

Job share in California vs. US overall (location quotient)

Farming, Fishing, and Forestry: 1.49
Personal Care and Service: 1.34
Arts, Design, Entertainment, Sports, and Media: 1.29
Life, Physical, and Social Science: 1.20
Computer and Mathematical: 1.13
Business and Financial Operations: 1.12
Architecture and Engineering: 1.11
Management: 1.11
Community and Social Service: 1.11
Legal: 1.02
Food Preparation and Serving Related: 1.01
Education, Training, and Library: 1.00
Protective Service: 0.96
Sales and Related: 0.96
Transportation and Material Moving: 0.96
Office and Administrative Support: 0.95
Construction and Extraction: 0.94
Building and Grounds Cleaning and Maintenance: 0.93
Healthcare Practitioners and Technical: 0.83
Installation, Maintenance, and Repair: 0.80
Production: 0.78
Healthcare Support: 0.75

Source: Bureau of Labor Statistics
California is at somewhat lower risk
Bay Area and Central Valley are worlds apart

Share of jobs that are "routine"

Source: U.S. Census, American Community Survey
Whose jobs are more at risk
The less-educated are most at risk
Workers in routine occupations, by education

- No high school degree: 59% US, 61% California
- High school degree only: 62% US, 61% California
- Associate's degree or some college: 50% US, 50% California
- Bachelor's degree: 28% US, 27% California
- Graduate degree: 11% US, 10% California

Source: U.S. Census, American Community Survey
Automation risk bit lower for older Californians

Workers in routine occupations, by age

<table>
<thead>
<tr>
<th>Age</th>
<th>US</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>51%</td>
<td>53%</td>
</tr>
<tr>
<td>25-34</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>35-44</td>
<td>42%</td>
<td>41%</td>
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<tr>
<td>45-54</td>
<td>44%</td>
<td>42%</td>
</tr>
<tr>
<td>55-64</td>
<td>45%</td>
<td>42%</td>
</tr>
<tr>
<td>65+</td>
<td>38%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Source: U.S. Census, American Community Survey
Racial gaps wider in California

Workers in routine occupations, by race/ethnicity (mutually exclusive)

- Hispanic or Latino: 53% (US), 55% (California)
- Black or African-American: 47% (US), 42% (California)
- White: 43% (US), 37% (California)
- Asian or Pacific Islander: 32% (US), 32% (California)

Source: U.S. Census, American Community Survey
Not just whose jobs are at risk, but also:

- **Transitions harder for:**
  - Older adults
  - Lower-income and less mobile households

- **Labor supply effects, especially for:**
  - Women
  - Older adults
Conclusions

- California somewhat less at risk – except Central Valley
- Less-educated and Hispanics are most at risk
- Transition barriers and supply effects are uneven, too
Thank you. For more:

- [www.hiringlab.org](http://www.hiringlab.org)
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