Future of Work Study

August 2020
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WorldatWork, in partnership with Greenwich.HR, invited its broader membership and customer base to participate in an electronic survey. Email invitations were sent directly to participants on 04/29/2020 and results were collected over a three-month period.

A total of 1,042 responses were received, representing organizations of different sizes and across multiple industries. Results have not been weighted, but respondent profiles have been included to assist with interpretation of results. Results are skewed to be more representative of mid-large employers, but statistical differences have been highlighted when present.

The error rate was based on how representative the results are for medium-large organizations.

Sample sizes vary by question. Please note that statistical reliability will fluctuate based on sample sizes.
Key Findings

• 22% of organizations automated jobs in 2019, and among those that did automate, they estimated 2.8% of overall jobs were impacted at their organization

• While Manufacturing is often an area considered for automation, we are seeing heavier automation activity in HR, Finance and Data Analytics

• For reskilling activity, we see heavier concentration in industries like Transportation and Production (e.g. Manufacturing)

• Production roles being reskilled are more likely to require passing a proficiency exam, while business, education and office positions are less likely to require an exam

• Organizations on average begin reskilling efforts 7.5 months prior to job elimination

• An examination of over 5.4 million job listings conducted by Greenwich.HR indicates that for jobs more likely to be automated, over the last two years companies have increased emphasis on context-specific requirements and decreased emphasis on general knowledge and experience requirements
Automation & Reskilling
One in five organizations indicate some degree of job automation in 2019

Did your organization automate any jobs in 2019?

- **Yes** 22%
- **No** 78%

- On average, those with visibility into exact automation figures estimated 2.8% of jobs were automated at their organization in 2019.
- Automation may be migrating away from Marketing and Manufacturing with higher automation activity reported in HR, Finance and Data Analytics.
31% of organizations conducted workforce reskilling activities in 2019

Did your organization conduct workforce reskilling activities in 2019?

- Yes: 31%
- No: 69%

\[ n = 743 \]
Larger number of organizations rely on hiring to fill skillsets rather than reskilling

Please indicate your organizations level of activity for each of the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not doing this at all</th>
<th>Doing this a little</th>
<th>Doing this some</th>
<th>Doing this a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hire employees instead of reskilling current employees</td>
<td>17%</td>
<td>42%</td>
<td>32%</td>
<td>9%</td>
</tr>
<tr>
<td>Rely on AI to reskill</td>
<td>40%</td>
<td>31%</td>
<td>22%</td>
<td>7%</td>
</tr>
<tr>
<td>Outsource to vendors instead of hiring/reskilling employees</td>
<td>29%</td>
<td>40%</td>
<td>24%</td>
<td>7%</td>
</tr>
<tr>
<td>Hire gig workers instead of full-time employees</td>
<td>45%</td>
<td>35%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>Invest in AI to perform work instead of hiring/reskilling employees</td>
<td>43%</td>
<td>29%</td>
<td>23%</td>
<td>6%</td>
</tr>
</tbody>
</table>
Virtual assistants are augmenting traditional office support roles

What types of jobs is your organization trying to reskill? Please select all that apply.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office and administrative support</td>
<td>45%</td>
</tr>
<tr>
<td>Business and financial operations</td>
<td>34%</td>
</tr>
<tr>
<td>Computer and mathematical operations</td>
<td>22%</td>
</tr>
<tr>
<td>Production operations</td>
<td>21%</td>
</tr>
<tr>
<td>Sales</td>
<td>17%</td>
</tr>
<tr>
<td>Architecture and engineering</td>
<td>12%</td>
</tr>
<tr>
<td>Installation, maintenance and repair</td>
<td>10%</td>
</tr>
<tr>
<td>Education, training and library</td>
<td>10%</td>
</tr>
<tr>
<td>Transportation</td>
<td>5%</td>
</tr>
<tr>
<td>Arts, design, entertainment, sports and media</td>
<td>4%</td>
</tr>
<tr>
<td>Life, physical and social science</td>
<td>3%</td>
</tr>
<tr>
<td>Food preparation and service</td>
<td>3%</td>
</tr>
<tr>
<td>Personal care and service</td>
<td>3%</td>
</tr>
<tr>
<td>Community and social service</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
</tr>
</tbody>
</table>

n = 174
Heavy concentration of Transportation roles being reskilled

To what degree has your organization reskilled the following types of jobs?

<table>
<thead>
<tr>
<th>Job Category</th>
<th>Low (less than 20% of daily job duties)</th>
<th>Moderate</th>
<th>High (greater than 50% of daily job duties)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>14%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>Sales</td>
<td>41%</td>
<td>28%</td>
<td>31%</td>
</tr>
<tr>
<td>Production operations</td>
<td>57%</td>
<td>23%</td>
<td>20%</td>
</tr>
<tr>
<td>Community and social service</td>
<td>40%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Installation, maintenance and repair</td>
<td>56%</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>Arts, design, entertainment, sports and media</td>
<td>57%</td>
<td>29%</td>
<td>14%</td>
</tr>
<tr>
<td>Business and financial operations</td>
<td>60%</td>
<td>26%</td>
<td>14%</td>
</tr>
<tr>
<td>Education, training and library</td>
<td>50%</td>
<td>38%</td>
<td>13%</td>
</tr>
<tr>
<td>Architecture and engineering</td>
<td>71%</td>
<td>19%</td>
<td>10%</td>
</tr>
</tbody>
</table>

n = 164
Administrative Support has a lower emphasis on reskilling daily job duties

To what degree has your organization reskilled the following types of jobs? (Cont.)

<table>
<thead>
<tr>
<th>Job Category</th>
<th>Low (less than 20%)</th>
<th>Moderate</th>
<th>High (greater than 50%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office and administrative support</td>
<td>66%</td>
<td>27%</td>
<td>7%</td>
</tr>
<tr>
<td>Computer and mathematical</td>
<td>60%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>Life, physical and social science</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
</tr>
<tr>
<td>Food preparation and service</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
</tr>
<tr>
<td>Personal care and service</td>
<td>60%</td>
<td>40%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>53%</td>
<td>7%</td>
</tr>
</tbody>
</table>

n = 164
Virtual learning is most common channel for employee reskilling efforts

What types of education programs is your organization offering to employees? Please select all that apply.

<table>
<thead>
<tr>
<th>Type of Program</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to online educational platforms</td>
<td>71%</td>
</tr>
<tr>
<td>Mentoring</td>
<td>62%</td>
</tr>
<tr>
<td>Tuition reimbursement</td>
<td>57%</td>
</tr>
<tr>
<td>Formal internal reskilling course/program</td>
<td>49%</td>
</tr>
<tr>
<td>Apprenticeships</td>
<td>23%</td>
</tr>
<tr>
<td>Paid leave for training</td>
<td>19%</td>
</tr>
<tr>
<td>Company-sponsored scholarships</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
</tbody>
</table>

n = 166
On average, 33% of positions require a proficiency exam

*If you are requiring a proficiency exam in order to successfully pass through the reskilling process, for which roles are you requiring this?*

<table>
<thead>
<tr>
<th>Role</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food preparation and service</td>
<td>50%</td>
</tr>
<tr>
<td>Installation, maintenance and repair</td>
<td>44%</td>
</tr>
<tr>
<td>Transportation</td>
<td>43%</td>
</tr>
<tr>
<td>Community and social service</td>
<td>40%</td>
</tr>
<tr>
<td>Sales</td>
<td>38%</td>
</tr>
<tr>
<td>Education, training and library</td>
<td>38%</td>
</tr>
<tr>
<td>Production operations</td>
<td>34%</td>
</tr>
<tr>
<td>Architecture and engineering</td>
<td>33%</td>
</tr>
<tr>
<td>Life, physical and social science</td>
<td>33%</td>
</tr>
<tr>
<td>Computer and mathematical</td>
<td>32%</td>
</tr>
<tr>
<td>Business and financial operations</td>
<td>22%</td>
</tr>
<tr>
<td>Personal care and service</td>
<td>20%</td>
</tr>
<tr>
<td>Office and administrative support</td>
<td>15%</td>
</tr>
<tr>
<td>Arts, design, entertainment, sports and media</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>33%</td>
</tr>
</tbody>
</table>

n = 163
On average, organizations start reskilling 7.5 months in advance of job elimination.

How far in advance does your organization start reskilling workers knowing the job may be eliminated? Please indicate months in a whole number.

- 0-3: 35%
- 4-6: 36%
- 9-12: 19%
- More than 12: 10%

n = 114
Organizations are approaching hiring for automated roles in a variety of ways

How is your organization approaching hiring for roles you know may be automated in the next 12 months?

Assessments/evaluations to hire up or re-train
- “Assessing candidates for their learning proficiency, resilience and adaptability”

Contract/temporary hiring
- “Generally we would not hire roles that we know will be automated within 12 months, but if there is a business need, we would hire a temporary/contract employee for the interim period”

Hiring for special skills to develop/manage automation efforts
- “New hires with special skill set - cloud engineers”
- “Seeking more computer savvy skill sets”

Hiring freezes
- “At this time, we are in a general hiring freeze. The intent for potentially automated positions is to maintain our current workforce and consider on a case by case basis whether to fill vacancies (based on per site operational need).”

Internal training
- “Cross training or finding alternate roles in the organization”

n = 104
One-third of organizations are setting retention targets for reskilling

Is your organization setting retention targets for reskilling? For example, wanting to retain 50% of your associates whose jobs will be displaced by automation.

- Yes: 31%
- No: 69%

Please note that statistical reliability will fluctuate based on sample sizes.

n = 94
60% of organizations rank budget and time the greatest challenges in reskilling efforts

Please rank the barriers that have been a challenge for your organization’s reskilling efforts.

Order represents percentage of respondents ranking items first or second most challenging for reskilling efforts.
Organizations need updated and online accessible courses with skilled trainers

What training materials or resources does your organization need for reskilling efforts?

Courses, updated materials

• “With the current environment, being able to do everything virtually”
• “Certified on-line courses and materials”

Trainers

• “Qualified trainers”
• “Facilitators/competent trainers”
• “Outside vendors with ability to impart knowledge when resident knowledge is not present in the workplace”

Please note that statistical reliability will fluctuate based on sample sizes.

n = 35
Trends in Job Listings
Methodology

- Greenwich.HR compiles data on 70 percent of all U.S. job listings, representing all job families, and tracks the prevalence of thousands of key words.

- In order to analyze how job requirements are changing for jobs which are higher priorities for reskilling, Greenwich.HR examined U.S. job listings posted during the May and June 2020 and compared them to listings posted during the same months in 2018.

- Job attributes were assigned one of six categories to highlight which types of job attributes companies are emphasizing/de-emphasizing.

- Over 5.4 million job listings were included in this analysis.
Overall

• In the last two years, companies have shifted their emphasis for job requirements
  • Across all types of jobs, individual experience and traits are becoming more heavily emphasized
  • Experience requirements are loosening – the proportion of jobs that require a high school diploma increased by 5%
  • Requirements are becoming more specific; general knowledge requirements are being de-emphasized
• Rewards components are also being emphasized much more heavily
  • Even in a period of high unemployment, companies have ramped up marketing of non-pay rewards components
Overall

Job Listing Keyword Analysis – All Job Listings
Change In Prevalence 2020 vs 2018

Changing Job Attributes
All Job Listings
2020 vs 2018

- Knowledge
- Setting
- Task
- Experience
- Trait
- Rewards

Number of Attributes With Increased Emphasis
Number of Attributes With Decreased Emphasis

Paid Time Off: 7%
Sales: 7%
Work Weekends: 6%
1 Year: 6%
High School Diploma: 5%
Marketing: 5%
Training: 5%
Flexible: 4%
Day Shift: 4%
Dental Benefits: 4%
Vision Insurance: 4%
Operations: 4%
Warehouse: 4%
Design: 3%
Life Insurance: 3%
Communication: -3%
Inventory: -3%
Security: -3%
Management: -3%
Accounting: -4%
Safety: -4%
Construction: -4%
Hotel: -4%
Transportation: -5%
Senior: -5%
Intern: -5%
Fun: -5%
Emergency Room: -5%
Lead: -6%
Excel: -6%
Jobs Identified For Reskilling

• For jobs identified by survey respondents as the highest priorities for reskilling, requirements cited in job listings are shifting to emphasize context

• Job requirements based on specific settings and tasks are receiving increased emphasis
  • This suggests companies are honing their emphasis to find employees who can most rapidly fit into the organization and most quickly ramp up their productivity

• For these types of jobs, general knowledge is being de-emphasized, as are to a lesser degree experience and traits
  • High school diploma requirements are increasing in emphasis, while advanced degrees and more senior experience levels are receiving less emphasis

• This indicates that for these jobs, the areas that are the most difficult to automate or outsource are becoming more important job attributes
Jobs Identified For Reskilling

Job Listing Keyword Analysis – Reskilling Priorities
Change In Prevalence 2020 vs 2018

Changing Job Attributes
Jobs With Higher Priority For Reskilling
2020 vs 2018

- Number of Attributes With Increased Emphasis
- Number of Attributes With Decreased Emphasis

- Work Weekends 10%
- Paid Time Off 10%
- Operations 9%
- Sales 9%
- High School Diploma 8%
- 1 Year 7%
- Flexible 7%
- Training 7%
- Dental Benefits 7%
- Vision Insurance 7%
- Day Shift 5%
- Friendly 5%
- Marketing 5%
- Life Insurance 5%
- Standards 5%
- Analytical -6%
- Management -6%
- Budget -7%
- Compliance -7%
- ENT -8%
- Reporting -8%
- Emergency Room -8%
- Construction -10%
- Fun -10%
- Excel -11%
- Senior -11%
- Communication -11%
- Lead -12%
- Intern -12%
- Accounting -16%

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Respondent Profile
Company Sector

Your organization is:

- Private, publicly traded: 31%
- Private, privately-held: 43%
- Government/ Public sector: 11%
- Nonprofit/ Not-for-profit: 16%

n = 705
Company Industry and Size

Under which industry does your organization fall?

- Manufacturing: 14%
- Financial services: 13%
- Consulting/profession...: 12%
- Information technology: 9%
- Healthcare/pharma: 8%
- Energy: 7%
- Retail: 4%
- Other: 29%

n = 705

How many full-time equivalent (FTE) employees does your organization have?

- Fewer than 100 employees: 14%
- 100 to 999: 24%
- 1,000 to 9,999: 42%
- 10,000 to 39,999: 15%
- 40,000 or more employees: 6%

n = 705
About Us

WorldatWork, the Total Rewards Association, is the leading global nonprofit organization for professionals who are engaged in the critically important practice of Total Rewards. We serve those who are responsible for cultivating inspired, engaged, productive, and committed workers in effective and rewarding workplaces. We guide them in the design and delivery of Total Reward programs with our education and certification; idea exchange; thought leadership; knowledge creation; information sharing; research; advocacy; and networking. Founded in 1955, WorldatWork serves Total Rewards professionals throughout the world working in organizations of all sizes and every industry.

Greenwich.HR brings an entirely new lens to seeing the labor market, allowing innovations and efficiencies that have never been possible. Greenwich.HR provides the largest, fastest-growing, and most precise labor market data platform available. We track the hiring and pay behaviors of over 3.5 million organizations in real time. We provide daily intelligence on 70 percent of all new US jobs, and now we're expanding our coverage internationally. Learn more at www.Greenwich.HR.
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