Automation and AI will change the skills needed in the workforce

Total is for United States and 14 Western European countries

**HOW WORKFORCE SKILLS WILL SHIFT**

**MINDSET SHIFT**
Instilling a culture of life-long learning and providing training opportunities for employees

**ORGANIZATIONAL SET-UP**
More agile corporate structures featuring less hierarchy and more collaborative team networks

**“NEW COLLAR” JOBS**
Activities will be reallocated between workers with different skill levels, creating a new set of middle-skill positions

**WORKFORCE COMPOSITION**
The booming gig economy will lead to a rise in the use of independent contractors and freelancers

**C-SUITE AND HR CHANGES**
Senior leadership and key functions will also need to adapt, including a change in CEO mindset and talent strategies to orchestrate the changes

**Structural design changes to cope with the realities of shifting skill needs**

**Five options for companies to build their workforce for the future**

- **HINGED**
  - General equipment operation and navigation
  - Inspecting and monitoring

- **BASIC**
  - Basic data input and processing
  - Basic literacy, numeracy, and communication

- **HIGHER**
  - Creativity
  - Complex information processing and interpretation

- **SOCIAL**
  - Entrepreneurship and initiative taking
  - Leadership and managing others

- **TECHNOLOGICAL**
  - Advanced IT skills and programming
  - Basic digital skills

**Competition for talent**
To recruit the people they need for a new era of automation, companies say they will

- Hire away from competitors
- Offer more attractive wages
- Broaden recruiting efforts including from non-traditional sources
- Use industry connections

**Total is for United States and 14 Western European countries**

**HOW WORKFORCE SKILLS WILL SHIFT**

<table>
<thead>
<tr>
<th>SKILLS</th>
<th>Physical and manual</th>
<th>Basic cognitive</th>
<th>Higher cognitive</th>
<th>Social and emotional</th>
<th>Technological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours spent, in 2016</td>
<td>203</td>
<td>115</td>
<td>140</td>
<td>119</td>
<td>73</td>
</tr>
<tr>
<td>Billion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in hours spent by 2030 %</td>
<td>-14</td>
<td>-15</td>
<td>8</td>
<td>24</td>
<td>55</td>
</tr>
</tbody>
</table>

**Skills with the biggest shift in demand**
- General equipment operation and navigation
- Inspecting and monitoring
- Basic data input and processing
- Basic literacy, numeracy, and communication
- Creativity
- Complex information processing and interpretation
- Entrepreneurship and initiative taking
- Leadership and managing others
- Advanced IT skills and programming
- Basic digital skills