AI and the Future of Skill Demand

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AI: Intelligent Machines, Smart Policies
OECD, 27 October 2017
One overlooked point about AI and work

• Key constraints on how AI will affect jobs and skills
  o Distribution of human proficiency
  o Practical limits of education systems
Example: OECD’s Survey of Adult Skills (PIAAC)

- PIAAC measures 3 widely-used work skills
  - Literacy, numeracy, problem solving with computers
  - 75% OECD workers use these skills every day
  - Huge investment in education to develop them

- PIAAC measures practical tasks
  - Webpage on making international phone calls
  - Table showing results for a blood test
PIAAC Literacy: OECD Adults

<table>
<thead>
<tr>
<th>Proficiency Level</th>
<th>OECD Adults</th>
<th>AI</th>
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## PIAAC Literacy: OECD Adults vs. AI

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PIAAC Literacy Level 4-5

• We can do better than the OECD average of 11%
  o Adults with tertiary education: 21%
  o Adults in Japan with tertiary education: 37%

• But improvements are hard
  o Decreased 2 percentage points since 1990s

• No examples at scale with most adults at Level 4-5
  o Would be a problem if literacy was the only work skill
What about other work skills?

• We don’t know how AI capabilities compare to
  o Distribution of human proficiency
  o Practical limits of education improvement

• Proposed OECD-National Academies programme
  o Assess capabilities of AI in all work skills
  o Compare to human skills and education potential