

# 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

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- Key constraints on how AI will affect jobs and skills
  - Distribution of human proficiency
  - Practical limits of education systems

# Example: OECD's Survey of Adult Skills (PIAAC)

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- 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

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Proficiency Level	OECD Adults	AI
2 and below	53%	
3	35%	
4-5	11%	

# PIAAC Literacy: OECD Adults vs. AI

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Proficiency Level	OECD Adults	AI
2 and below	53%	Yes
3	35%	Close
4-5	11%	No

Source: Elliott, 2017, *Computers and the Future of Skill Demand*, OECD

# PIAAC Literacy Level 4-5

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- We can do better than the OECD average of 11%
  - Adults with tertiary education: 21%
  - Adults in Japan with tertiary education: 37%
- But improvements are hard
  - Decreased 2 percentage points since 1990s
- No examples at scale with most adults at Level 4-5
  - Would be a problem if literacy was the only work skill

# What about other work skills?

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- We don't know how AI capabilities compare to
  - Distribution of human proficiency
  - Practical limits of education improvement
- Proposed OECD-National Academies programme
  - Assess capabilities of AI in all work skills
  - Compare to human skills and education potential



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