JACOB WALLENBERG

Work in The Future, October 4, 2018

The Jacob and Marcus Wallenberg Centre for Innovative and Sustainable Business Development



TECHNOLOGY CONSTANTLY IMPACTS BUSINESS AND EMPLOYMENT MIX

Large-scale sector employment declines have been countered by growth of other sectors that have absorbed workers Share of total employment by sector in the United States, 1850–2015



ACCORDING TO A MCKINSEY STUDY: LESS THAN 10% OF JOBS CAN BE FULLY AUTOMATED, BUT NEARLY ALL JOBS WILL BE IMPACTED



THE SKILLS NEEDED WILL SHIFT, TOWARDS MORE TECHNOLOGICAL AND SOCIOEMOTIONAL SKILLS

All sectors, United States and Western Europe



		Hours, 2016 billion	CI 20	hange in nu)16-30, %	mber of hours	5	
Stra Stra	Physical and manual skills	203		14			
\square	Basic cognitive skills	115	-	15			
	Higher cognitive skills	140			8		
	Social and emotional skills	119				24	
	Technological skills	73					55
	Total hours	650					

AUTOMATION TECHNOLOGIES HAVE THE POTENTIAL TO POSITIVELY AFFECT PRODUCTIVITY



A SIGNIFICANT RESKILLING EFFORT WILL BE REQUIRED - APPROXIMATELY 475,000 INDIVIDUALS PER YEAR



Estimated required reskilling and upskilling per year, % of entire labour force per year

~7% new skills required as a result of the automation and AI transformation



~4% new digital

foundation skills to meet growing demand for digital skills

 $\sim 2\%$ overlap as digital skills training will also help improve non-digital skills



~9% of the Swedish labor force need to be reskilled each year (475,000 FTE's) The new human capital cycle will be 10 years (vs 25 years today)

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