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## Robots in a new era of productivity and efficiency: Implications for industry transformation.

Growing consumer markets and global competition require continuous expansion and modernization of production capacities. Adoption of high tech robot systems help companies to increase production output, maintain high quality standards, improve productivity and upgrade the quality of work by taking over unsafe, tedious and dirty jobs. Literature points that growth in robot adoption may impact in decline of jobs and wages; it also suggests that higher level of education will help on the transition to adapt and switch to new occupational categories.

Five countries (China, Korea, USA, Germany, Japan) own 72% of world stock of robots. We analyse data from 10 countries (robot densification, employment, wages, education, GDP indicators).

Our findings show that higher robot densification contributes to an increase of labor productivity, but not necessarily to an increase of unemployment rates, job losses or a decrease of wages.

Implications for public policy and for businesses are discussed.