

## Digital transformation and employment

La Vanguardia (Spain) Rafael Doménech 23 Nov 2017

Is mankind condemned to mass technological unemployment with the fourth industrial revolution, or will it allow us to achieve a society with full employment and quality jobs, freed from the most routine and least creative tasks? The effects of automation, artificial intelligence, big data and the internet of things on future employment and social wellbeing are full of uncertainty. For pessimists, machines will destroy employment and society will be more unequal. For optimists there is no reason why the effects should be any different from those observed since the first industrial revolution: there will be new jobs, greater productivity, higher wages and more leisure for all. At the beginning of the twentieth century 41% of jobs in the US and 64% of those in Spain were in agriculture. Progress allowed the majority of these workers to move to more productive jobs with higher wages. Today's unemployment rate is similar to that of the beginning of the twentieth century, despite the increase in the active population and in the rate of participation. Income per capita has increased eightfold in the US and nearly tenfold in Spain, while life expectancy at birth has increased from 34.8 to 83.2 years in 2016, and inequality has been cut by a quarter.

The evidence shows for now that the economies that have advanced furthest in digital transformation tend to have lower rates of unemployment and many of them also experience less inequality, although the picture is rather uneven from one country to another. But we also see that the fourth industrial revolution is behind the polarisation by occupation, that routine jobs are being destroyed while other new ones are created, and that the wages of the most qualified workers are growing faster than those of other workers.

Employment policies, education and all the measures ensuring equal opportunity and social inclusion will be crucial to protect people, not jobs that become obsolete. Progress is not linear and history does not imply a predetermined destination. Everything will depend on whether or not changes are managed effectively. Society and its institutions must modernise as technology progresses, in order for the new advances to allow us to continue improving social wellbeing and creating opportunities for all in the future. That's the challenge.

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