10 things you should know about digitalisation and its impact on labour markets

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The Fourth Industrial Revolution is knocking on our door. It is going to radically change employment and the nature of work in the coming years. Our economies must prepare for a storm of unprecedented technical and socio-economic changes that will affect labour markets and will radically transform our relationship with work. Here are the 10 most significant trends triggered by this digital revolution.

- 1. Digitalisation of the economy is not a new phenomenon, but it has reached a new tipping point. The marriage between Big Data and robotisation heralds a new economy and hence a new world of work.
- 2. There are two principal new features of this phenomenon: one is the evolution of the platform-based economy, founded on new economic models with a 'winner takes all' philosophy, and the other is the development of peer-to-peer exchanges. Along with the proliferation of digitalised goods and services, together these features create a radical innovation in the labour market.
- 3. Digitalised information as a strategic economic resource is also not a new phenomenon. It can in fact be traced back to the ideas of the networked society and knowledge-based economy popular in the 1990s.
- 4. The Fourth Industrial Revolution is what we call the digital revolution today. It consists of developments in information technologies combined with robotisation, automation of tasks, the internet of things, 3D printing, driverless cars, and in the field of defence and the fight against terrorism drones, cyberweapons, surveillance, etc. The first industrial revolution was that of the steam engine, the second that of electrification and mass production, and the third that of the computer.
- 5. The Fourth Industrial Revolution could create new types of jobs, new sectors, new products and new services (data analysts, data miners, data architects, and software and application developers).
- 6. It could also precipitate fundamental changes in working practices. There could be new forms of worker/machine interaction and new types of jobs for instance in relation to the so-called 'uberisation' which result in new risks (work intensification, health and safety, increasingly porous private/working life boundary, training mismatches, discrimination, etc.) and effects at the managerial level, such as the new digital management.
- 7. Digitalisation also means job destruction: jobs that will be at risk over the next 10-20 years due to computerisation, automation and robotisation are increasing. While there is no consensus on exactly how many jobs will be lost, it is clear that the number will be very high.
- 8. In Europe, an average of 54% of jobs are at risk, according to different studies. The peripheral countries in Europe seem to be the most affected by the job destruction caused by the computerisation of employment. Likewise, countries with developed broadband infrastructures and workers' e-skills, as well as widespread use of the internet and digital public services, are likely to be less threatened by digitalisation than countries with a less developed digital infrastructure.
- 9. Shifts in existing jobs towards their digitalized counterparts will occur in the workplace. This is particularly the case with the development of digital platforms and crowdworking, where workers from countries with high levels of social protection are brought into competition with those from countries with low levels of protection and from developing countries. The relocation of services facilitated by certain platforms of the 'sharing economy' is also applicable to high-skilled jobs, such as accounting, finance, etc.

10. The digital economy is likely to create an increasingly polarised society characterised by gaping inequality between the few 'winner-takes-all superstars' and the masses of 'losers', as well as by a hollowing out of the middle classes, with the disappearance of large numbers of medium-skilled jobs and the proliferation of a new class of 'digital galley slaves' who perform the tasks of data sorting/ entry/ filtering/ filing, cleaning up forums, monitoring images, etc. It is to avoid a situation in which the industrial revolution of the 21st century plunges the world back into social conditions reminiscent of the 18th century that labour organisations in many European countries are calling for a new social charter to regulate the digital economy.