

## Digital Economy: Big Data, Skills and Education

I thought it would be instigating to finalize the discussions around this week's topic, 'The economies of the Digital Education' with some initial reflections involving big data analysis.

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Big Data (a term used to describe the analysis of a massive volume of both structured and unstructured data), is currently used by organizations for various purposes, primarily to help **forecast or predict scenarios** and take preventive action for more productive business results.

During 2013 MIT Sloan CIO Symposium, professor Erik Brynjolfsson added that 'beyond being a technology and scientific revolution, big data should be viewed as a management revolution. We have mostly been managing things by gut, intuition and hunches because we've lacked the appropriately analysed data to do otherwise'.

In education, a lot of student behaviour, testing results, careers developments as well as educational needs based on changing societies have already been stored and used for statistical analysis by government agencies. With the rise of more and more online education and the development of MOOCs, all the data generated gets a completely new meaning and volume. Schools, colleges and universities can use Big Data to track and analyse absolutely everything that happens with the students, for example, their learning styles, the time of day they learn better, the areas in which they might be getting 'stuck', the pages they revisit often,

In fact, according to an article in U.S. News & World Report (The Coming Big Data Education Revolution), 'MOOCs have become the flavour of the moment in higher education reform circles...but MOOCs are not a transformative innovation that will forever remake academia. That honour belongs to a more disruptive and far-reaching innovation – big data.'

The thing is: there are risks and benefits of living in a society based on data. Above all, this will require careful management to protect privacy and prevent data from being used for the wrong purposes, such as the case of NSA snooping in various countries reported by Edward Snowden, or in situation where organizations start to treat people as replaceable parts based on statistical numbers (only buy/hire what exactly fits and throw away when broken/"particular skill not needed"). A good reflection in this case will be: who owns the data and who controls them?