

Digital Technology and Mankind

A few preliminary remarks

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- 1 We are witnessing increasingly frequent and deeper waves in technology. Among them the most important and pervasive is digital technology that deeply influence our way of life, behavior, social and political interaction.
- 2 Over the last 25 years we have seen i) the internet era based on the PC and connectivity; ii) mobile internet era based on the smartphone ,with a huge progress in connectivity and in the number of users; iii) the big data revolution, in association with AI (Artificial Intelligence, based on algorithms) and the rise of a few technological monopolies.
- 3 Such developments are radically changing societies and the man-machine relationship
- 4 Where are we going, as a society, is a matter for futurologists (and possibly artists). But interesting contributions may come from many disciplines and angles, including economics.
- 5 Recent books, such as Harari, Homo Deus, 2017 and Kelly, What Technology Wants, (2010) as an interesting article by Niall Ferguson (2018) argue that future trajectories, maybe even alternative ones, will be defined by technology per se. At worst digital technology will dominate mankind; at best they will merge with it. But the old notion that man dominates technology is to be abandoned.
- 6 I strongly believe that the mankind-technology relationship is driven (and created) by economic (profit) motivations. We can support this view with data and examples as well as with economic principles. Therefore the future of technology can be directed and regulated if we agree on what we want. At least at the aggregate level, "Faber est suae quisque fortunae".
- 7 Let's go in order. Yuval Noah Harari, in his second book, Homo Deus, believes that digital technology is getting a momentum of his own and will shape the future, making humankind eventually superfluous, and creating the useless man. This is the post-industrial economy a la Daniel bell (1973), revisited on deeper foundations. Among many other considerations, Harari argues that Democracy and Free market will collapse once the Googles, Facebooks, Twitters and Amazons of this world will know us better than we know ourselves and will rule societies and individuals by means of networked algorithms.
- 8 Kevin Kelly in a seminal book of 2010, what technology wants, argues that digital technologies, will shape society on their own, by inevitably increasing: efficiency; opportunities; emergence; complexity; diversity; specialization; ubiquity; freedom; mutualism; beauty; sentience; structure, evolvability". Maybe his view is too deterministic, maybe too optimistic but the intuition is similar to Harari's, a few years in advance.

- 9 I believe that the present 'digital-big data-AI revolution' is pretty clearly the consequence of innovation but is growing driven by profit and capital and can be curbed by regulation, provided we know what we want. The embryo of such regulation is different in the US, in China, and in Europe, and will be driven also by strategic considerations such as in the Broadcomm-Qualcomm aborted M&A. Other important policy issues such as taxation are already kicking in.
- 10 To sum up this very preliminary consideration, I believe the most evident symptoms of digitalization should be analyzed in a holistic framework, should be understood and managed, i.e. regulated, before it becomes too late.
- 11 Traditional futurology assumes that the man tomorrow will look very much like today, enhanced by extraordinary technologies. Modern thinkers like Harari, Kelly and others believe the men will be dominated by technology and at best will merge with it. I believe none of the two views is a fruitful assumption, while we should think about using market forces and regulation to direct the future of technology in order to achieve sustainable alternatives for mankind.

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