



## CLAIMING OUR HUMANITY -MANAGING IN THE DIGITAL AGE



We are becoming aware that the major questions regarding technology are not technical but human questions.

Peter Drucker, Technology and Society in the Twentieth Century, 1967

BACKGROUND The breathtaking and continuing exponential evolution of digital technology has the potential to making human lives better. Any human being can now communicate with any other human being at practically zero cost. Anyone can have almost instant access to any book or article ever published. Teams, networks and ecosystems of collaboration now enable massive gains in productivity in modes of working that have the potential of drawing on the full talents and capabilities of what each individual can contribute, Customers are newly empowered to insist on better, faster, cheaper, lighter, smaller, more personalized and convenient products. People in the poorest countries in the world suddenly have access to information and finance as frugal innovation enables change that was unthinkable without the new technology.

> Yet this unprecedented development brings humanity up against a moment of truth: how to reconcile the enduring human needs for purpose, meaning, fulfilment, engagement, dignity, caring for others and community with technologies that pervade and disrupt many aspects of our lives, apparently usurping what used to be considered human work and responsibilities with a self-driven dynamic that seems to be beyond human control.

This increasing tension manifests itself in various ways.

- Ubiquitous connectivity is changing how work gets done, how organizations take shape, how business ecosystems form and what business models prove most powerful. As The Economist puts it in a recent article about the rise of freelance work on demand, the new capabilities "will challenge many of the fundamental assumptions of 20th-century capitalism, from the nature of the firm to the structure of careers."
- Expanding abilities to collect, combine and analyze "big data" including data gained from the growing Internet of Things – will translate into unprecedented real-time monitoring of events and phenomena and provide analytical tools for fact-based decision-making that taps into the predictive capabilities of complex algorithms. This will require a reassessment of the value of human judgment which cannot be modelled with algorithms.
- Software "bots" with learning capabilities promise to outstrip human analytical intelligence, and increasingly make autonomous decisions without necessarily incorporating human intuition, creativity and ethics. As a consequence it is anticipated that significant parts of knowledge jobs will be automated and delegated to machines, as shown in a study at Oxford University by Carl Benedikt Frey and Michael A. Osborne.

- In the past, productivity-enhancing technology has always, ultimately, yielded more jobs for people than it initially eliminated. This time, it is not clear that the pattern will hold. The threat to jobs is particularly troubling in an environment where we already are struggling to cope with significant levels of unemployment and underemployment, particularly among the young.
- There is no doubt that advanced research in areas such as bionics, genomics, nanoengineering and synthetic biology is throwing up huge potential right across the economy.

Hence the key question becomes whether we will see the type of innovation that drives growth, jobs and improve living standards or whether we are set for a period of slow growth and secular stagnation, as Larry Summers has put it. Why is it that despite all the mind-boggling technical progress we are not yet seeing the massive new industry, market- and job-creation along the lines experienced in previous technology revolutions (steam, electricity, combustion engine etc). Is it a failure of our current management model with its reductionist view of human nature (rational economic man) that has led to a predominance of narrow economic and quantitative metrics and reference frameworks? As demonstrated by leading management thinkers such as Clayton Christensen, William Lazonik, Dominic Barton and Roger Martin, flawed measurements and short-termism lead to misallocation of capital favouring near-term efficiency to the detriment of market-creating innovation and long-term growth. Is the current predominantly technocratic and overly rationalistic management mindset leading us in the wrong direction by discounting the value of human capital with its inherent unique capabilities and potential?

In their recent book *The Second Machine Age*, Erik Brynjolffson and Andrew McAffee observe that digital advance places us squarely at a historic inflection point in human civilisation. It is therefore critical to face the challenges and choose wisely. Carlota Perez argues in her book *Technological Revolutions and Financial Capital* that the ICT revolution has not yet produced a "Golden Age" - as she had identified them in previous technology cycles; however widespread prosperity should be within our reach provided investors give priority to entrepreneurial opportunities resulting from digital technologies as opposed to speculation and casino-style Capitalism. Michael Porter points in his recent HBR article to a secular opportunity in the field of smart, connected products that he believes will give rise to the next era of IT-driven productivity growth.

The needs in a world with seven billion human beings aspiring for a good life are beyond imagination. Management will have to live up to its calling as society's major leadership group as posited by Peter Drucker and help shape the way towards a period of global prosperity fueled by the innovative and transformative power of digital technology - ultimately putting the human being in the centre of all endeavours.

## **KEY QUESTIONS**

Key questions that that will be explored at the 2015 Forum include (work in progress - will be updated based on inputs during February and March):

- How can we ensure that the use of digital technology is consistent with improving the human condition and creating wealth and well-being for many? What is the role of management in this?
- How can we use technology not to displace human workers, but to bring to bear the enormous human capacity that is available and is eager to engage?
- How to better articulate and put in perspective the "human difference" when it comes to the use of digital tools?

- Can we create a new management paradigm following Drucker's concept of "management as a liberal art" and Mintzberg's definition of management practice as "an art, a craft and a little bit of science"?
- How can the prevalent technocratic mindset with its focus on quantification, algorithmic logic and pure rationality be balanced by a rediscovery of what it means to be human?
- How to reduce and manage systemic risks and maintain the human dimension in large complex digital technology enabled systems?
- How can we overcome the bureaucratic machine model of the organization to avoid automation (hard-wiring) of a flawed and obsolete system?
- How can we use technology to move towards a new model of organization as caring communities converging to produce wider benefits (Charles Handy and Humanistic Management Network)?
- How can we spawn a new age of entrepreneurship where innovation is powered by technology in creative ways, moving us beyond process, cost and efficiency management?
- What type of education and development would managers need to help create this new world? What should change?
- What are the routes of action to avoid a culture of technology determinism without becoming technophobic??
- Can we articulate a new legal and regulatory framework in which the protection of individuals and the interest of providers are balanced in a fair way? What are new ethical codes of conduct that institutions and organizations should adhere to?
- How to bring the current phenomenon of financial speculation and casino-style Capitalism that typically follows technological revolutions more under control?
- What are the open platforms of the future (technical, financial and scientific) that can be provided to democratize innovation and to provide access to advanced technology capabilities at a broad basis?
- How can the transition to new economic models (collaborative economy, sharing economy) be facilitated without large-scale social and economic disruption?

Richard Straub, Febuary 18, 2015