

Notes to government ministers about the future of work

Over the coming decades, we can expect a significant shift in work as the forces of technology and globalisation, societal changes, demography and longevity, and energy resources impact on government around the world in a number of ways.

First, the forces of globalisation, that initially saw India emerge as the back office and China as the factory of the developed world will continue. However, over the coming decades an increasing proportion of high value, knowledge intensive work will be distributed to the developing economies. This will create a surge in what has been termed frugal innovation and will see the rapid globalisation of innovation and R&D.

Moreover, in a combination of globalisation and technology more than five billion people across the world will become connected to each other via the Internet and potentially to the Cloud which will hold much of the world's knowledge. This hyper-connectivity will create enormous grass root opportunities for rapid developments in education and community building. A government's capacity to enable every citizen – particularly the young – to access a computer and the Cloud will in the longer term create a crucial boost to productivity and innovation. Those regions where children do not have access to the knowledge of the Cloud will rapidly become the backwaters of the world.

Related to these advances, we can expect rapid technological advances to occur in the way that people learn skills and acquire knowledge, and that this will become increasingly important as high value work will require the mastery of deep skills. Expect to see computerised simulations, e-learning and blended learning rapidly replace traditional classroom teaching. As a result of these rapid grass root developments in innovative education, we can anticipate traditional positional advantage to rapidly erode as the talent markets of the world join up. Supporting every young person to gain marketable skills using the rapidly evolving learning technologies will be a key priority for government.

As a result of these forces, those with high value skills (in biotechnology, renewable energy or design for example) will increasingly choose to cluster near each other. We can anticipate that these clusters of mastery and skill will become more and more crucial to the economic health of a region. While these clusters are emergent rather than designed, never the less, a government's willingness to support high quality educational and cultural institutions will play a key role in the process of attracting and embedding these clusters.

Next, with regard to societal forces there are a number of factors in motion that will impact on how work gets done over the coming decades. Across many countries, citizen's trust in institutions, big businesses and governments is decreasing and is unlikely to increase. We can expect that ever more prevalent transparency and sharing of information will only serve to exacerbate this. As Generation Y and Z assume the mantle of citizenship we can expect those with a common goal to develop these agenda on the world stage. These active world communities will be increasingly technologically enabled, and over time will become joined up in a way that goes beyond country boundaries.

With regard to the forces of demography and longevity we can expect some significant impacts. A key proportion of the Gen Z cohort is expected to live beyond the age of 100. In one generation this will transform our assumptions about work, age and aging. Many of these healthy Gen Zs will want to work productively into their seventies and eighties and it will be a priority for governments to find ways to support these aspirations. This will also require a review of the current pension arrangements and a closer look at how people save for their retirement. However, while many in the developed world will live significantly longer, we cannot anticipate that fertility rates in most regions of the world will increase. The increasing proportion of the over-sixties in many developed countries will place an intolerable burden on the young. Opening borders to migration of both the skilled and those prepared to play caring roles will be crucial if this burden is to be eased.

Finally, the issues of dwindling energy resources will profoundly impact on the future of work. As the cost of energy increases and carbon tax becomes a reality, so companies will be required to transform the way that work gets done. Expect more home-based working, the rapid rise of technologically enabled virtual working, and the move of some manufacturing

capability back to the home market. Requiring corporations to take account of their carbon footprint will serve to accelerate this transformation.