Responsible Technology

Abstract

At the beginning of the third decade of the 21st century having a holistic strategy for the use of technology is vital for preserving our planet, humanity and finite resources. Science and artificial intelligence are now widely adopted in law enforcement, education, health care and many commercial applications including hand held devices, wearable equipment and remote applications.

The aim is to shape our future with adequate protection from too much automation and robotisation by identifying guidelines necessary to keep human intelligence at the forefront. We are now living in an age where sophisticated applications can be developed by individuals without much experience, potentially causing harm to the community and society.

Therefore when designing applications and hardware, we require careful consideration to the environment, health and safety and privacy. The Apple and Google app stores are full of software, which has not been accurately screened not to mention the dangers posed by body sensors and facilities to interact with other people's devices.

This paper analyses four technological examples to promote ethical innovation by establishing principles which concern not only scientists and engineers but all stakeholders involved including entrepreneurs, doctors and lawyers. The idea is to increase public awareness by sharing basic scientific knowledge to transform the occupations for decades to come without much disruption.

Introduction

In our fast paced and interconnected global world in the 21st century many parties involved in reaching agreements do not give the appropriate consideration to the wider consequences of the environment, scientific progress, responsible business and our mental wellbeing.

When designing, developing and using technology it is vital that we consider our quality of life to preserve our environment, relationships and traditions. There are several instances where statutory legislation has not been adequately updated to meet the scientific and social requirements of today.

Several public bodies and private think tanks have devised principles which should be adhered to when writing specification documents. The main aim is to plan efficient usage by foreseeing as many constraints as possible in order to gain public confidence. This is achieved by effective collaboration amongst the key stakeholders.

This paper considers several principles in combination with case studies to determine if a solution is suitable and how safety is guaranteed. The identified guidelines will then be used to propose occupations of the future involving space, nano technology and logistics in business, education, health, law and the environment.