## 2021 Royal Society of NSW and the Learned Academies Forum: "Power and Peril of the Digital Age"

## Government House, Sydney 4 November 2021

## Preamble<sup>1</sup>

e are at a moment in time when we must acknowledge and address the inexorably rising tide of data use and digital services. History will categorise the early decades of the 21<sup>st</sup> Century as the digital age, the age of prodigious development and use of digital technologies that enable us to transfer and access information easily and swiftly.

So much so that digital interaction is a defining characteristic of modern human life. Societies, economies, and political processes are infused and connected by the ubiquitous use of smart machines and software that process and communicate information to us in ways that would have been unimaginable just a few years ago. The pace of digitalisation was already fast by the end of 2019, before COVID-19 emerged.

The pandemic broke through cultural barriers and enabled implementation of digital strategies in a matter of days or weeks rather than years. Digital technologies and supercomputer simulation are central to dealing with the pandemic itself, as well as being the primary driver of productivity in almost every other aspect of society.

Companies, governments, and organisations across the world are increasingly taking advantage of the benefits associated with data analytics and simulation, artificial intelligence, and the Internet of Things to solve problems never solved before, to undertake projects in five days that would have taken five years.

Problems such as those embodied in the United Nations General Assembly's Sustainable Development Goals<sup>2</sup> and their achievement by 2030. Tangible benefits include greater social connectivity, learning opportunities, information access and usage, versatile working and transport, greater access to entertainment, and new forms of banking and finance.

Unlocking the power of the digital age also brings perils associated with concerns about data security, state-based and transnational crime and terrorism, complexity, privacy, social disconnection, media manipulation, distortion of the truth, communities left behind, national defence and market vulnerabilities, and outstripping rule-making and regulatory structures.

This year, the Royal Society of NSW in partnership with Australia's Learned Academies — Health and Medicine, Humanities, Science, Social Sciences, and Technology and Engineering — has chosen "Power and Peril of the Digital Age" as the theme for our annual Forum. Our goal is to have a grownup conversation about digitalisation and the use of data. It will be framed around the

<sup>1</sup> See video of the Forum at <u>https://www.youtube.com/watch?v=-xFGnpyAZUY&list=PLYFFwCGj2FIY-6HdbblwSrxwPwo5Nf29l&index=1</u>

<sup>2</sup> https://sdgs.un.org/goals

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future life of a child born on the day of the Forum, 04 November 2021. This child will be born into a world of increasingly complex digital systems that holds great value and vulnerability.

Starting with a technological framing, the Forum will explore several major aspects which will impact the journey of that child as we approach 2030 and beyond. We will explore aspects of technology, health, defence and security in a digital age, and the changing nature of industry as the world and society evolve.

Finally, our annual Forum will be a call to arms for the host Societies to focus on challenges identified during these two days that must be addressed for Australia to remain a prosperous, successful, and safe democracy in the digital age.