

INFO5992 Introduction to IT Innovations

Week 1

Tutorial 1: Importance of Innovation to a Country – Roles of the Government

In the lecture (week 1), we studied the importance of innovation to a country and the roles that the Government has in facilitating and enabling innovations. The annual “Australian Innovation System Report” presents data on the impact of innovation and related activities on business, industry and national performance. The report also outlines challenges and future opportunities for Australian innovation. In the 2016 edition [1], it had a theme in the evolution of Australia’s innovation indicators; and in 2017 edition [2], the report highlighted the importance of the High Growth Firms.

In this tutorial, we will further discuss the role of the Government in defining the Technological innovation of a Country. Form a group of 5 students. As a group, discuss the following points.

- a) Read Section 5.8 of the 2016 report [1], pages 82 – 85. It is important to note the roles of the Government in a Country’s innovation cycle. Study the cycle and look at the different roles of the Government. What are some of the ways that the Government can support innovation?
- b) *‘Historically, publicly-funded research has been essential to a range of significant innovations that turned out to have large economic returns. Notable examples include aviation, nuclear energy, the internet, pharmaceuticals, GPS navigation, biotechnology, artificial intelligence and robotics’* [1]. It is important to note that many of the given examples are technology (IT) innovations, e.g., Internet, GPS, AI and Robotics, and likely the others are enabled by these IT innovations. Why do you think these examples were publicly funded and not privately funded?
- c) [Optional / Homework] Read the ‘Feature Article’ of the 2017 report [2], pages 59-62. It presents findings on the “new tech means greater returns”. What is the outcome of this study and what does it say about the use of technologies as in ‘digital footprints’ and its impact on employment growths?

Towards the end of the class, a member of your group is to present the group’s findings. Summary of the discussion will be available after the tutorial.

[1] Australian Innovation System Report 2016, <https://industry.gov.au/Office-of-the-Chief-Economist/Publications/Documents/Australian-Innovation-System/2016-AIS-Report.pdf>

[2] Australian Innovation System Report 2017 <https://industry.gov.au/Office-of-the-Chief-Economist/Publications/AustralianInnovationSystemReport2017/index.html>