

ICTs and inequality: making a difference

2. Understanding contemporary technological change

Outline

1. Understanding and explanation
2. Technological memories
3. Convergence and miniaturisation
 - Convergence
 - Terminologies
4. The radio spectrum and its management
 - Key characteristics of the radio spectrum
 - Managing spectrum
 - Implications for standards and regulation
 - The future of LiFi
5. From fixed-line to wireless
 - Conceptual legacies – every household connected?
 - Satellite frequencies
6. From voice to data
 - Proprietary and open: enclosure of the commons
 - Free and Open Source software
 - Open Educational Resources and Content
7. Social Media and Over the Top services
 - Spatial concentration of production
 - The rise of social media
 - New business models
8. 5G and the Internet of Things
 - The Internet of Things
 - 5G and future technologies
9. Incubators, Digital Hubs and App development
 - Incubators
 - Digital Hubs
 - App Development
 - Smart cities
10. Blockchain and cryptocurrencies
 - The potential of blockchain
 - Bitcoin and its siblings
11. The importance of a technical *understanding*

Suggested readings

Core ideas:

- Blackman, C. and Srivastava, L. (eds) (2011) *Telecommunications Regulation Handbook: Tenth Anniversary Edition*, Washington: World Bank infoDev and ITU.
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Wider reading

- A.T. Kearney (2012) Winning the OTT war: strategies for sustainable growth, http://www.atkearney.co.uk/communications-media-technology/ideas-insights/article/-/asset_publisher/LCcgOeS4t85g/content/winning-the-ott-war-strategies-for-sustainable-growth/10192.
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- Bettig, R.V. (1996) *Copyrighting Culture: the Political Economy of Intellectual Property*, Boulder: Westview Press.
- Butcher, N. (author), Kanwar, A. and Uvali'c-Trumbi'c, S. (eds) (2015) *A Basic Guide to Open Educational Resources (OER)*, Paris and Vancouver: UNESCO and COL.
- Cantoni, L. and Danowski, J.A. (eds) (2015) *Communication and Technology*, Handbooks of Communication Science, Volume 5, Berlin: De Gruyter.
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