Innovation and New Product Development

# Lesson 1 (25 settembre 2018)

## Topics and references

* Introduction: the **importance of technological innovation** and the **innovation funnel**
  + Schilling ch. 1
  + Innovation within companies and countries
    - Eu R&D scoreboard 2015, pages 1-14, 37-54: <http://iri.jrc.ec.europa.eu/documents/10180/fda46922-4520-48e3-a19c-4499bdecc55a>
    - EU scoreboard 2018
    - <https://ec.europa.eu/docsroom/documents/30281>
* **Definitions of innovation**
  + Schilling ch. 3, Types of innovation
  + Oslo manual, ch. 3, sections 1, 2 and 3: <http://www.oecd.org/sti/inno/oslomanualguidelinesforcollectingandinterpretinginnovationdata3rdedition.htm>
  + Henderson and Clark, 1990, "Architectural innovation: the reconfiguration of existing product technologies and the failure of established firms", Administrative Science Quarterly, vol. 35, n.1, Pages 3-6: <http://www.wz.uw.edu.pl/pracownicyFiles/id12237-Henderson,%20Clark%20-%20Architectural%20innovation.pdf>
  + Christensen, What is Disruptive Innovation? Harvard Business Review, december 2015: <https://hbr.org/2015/12/what-is-disruptive-innovation> ; VEDI FOTOCOPIE CONSEGNATE IN AULA, PRIME 6 PAGINE
  + Design driven innovation (Verganti, 2009): <http://www.uniroma2.it/didattica/direzioneestrategie/deposito/Verganti.pdf>
  + Technology push vs market pull
* **Characteristics of technological innovation, models of technological innovation processes and R&D roles – five generations (slide)**
* **Sources (fonti) of innovation**
  + Schilling ch 2
* **Cases**:
  + Uber (disruptive innovation): aula fotocopie
  + Tesla (discussion about the type of innovation): aula fotocopie
  + Alessi (design driven): aula fotocopie
  + PillCam (sources of innovation): studio individuale, extra aula, fotocopie

# Lesson 2 (27 settembre, 2018)

## Topics and references

* **Cicli tecnologici**:
  + Cap. 3 Schilling pp. 113-116
  + Abernathy and Utterback, "A dynamic model of process and product innovation, OMEGA, vol. 3, n. 6, 1975, pages 4-9: <http://users.telenet.be/n8duivel/louis/2.%20A%20dynamic%20model%20of%20process%20and%20product%20innovation.pdf>
* **Design dominance and standard battles**
  + Schilling ch 4
* **Introduction to technology strategy**
  + the resource-based approach & dynamic capabilities
  + Teece, D. J., Pisano, G., & Shuen, A. (1997) Dynamic capabilities and strategic management. Strategic management journal, vol. 18(7), 509-533:

<https://search.proquest.com/docview/231174373?pq-origsite=gscholar>

* + L’approccio alla base del libro Schilling

## Cases:

* + L’irresistibile ascesa di Microsoft (aula fotocopie)
  + Mobile payment: la sfida dello standard nei pagamenti digitali (aula fotocopie)
  + Altri esempi sulle dimensioni della strategia tecnologica (selezione o ambiti tecnologici, acquisizione e gestione della proprietà intellettuale, timing):
  + <http://www.leonardocompany.com/innovazione-innovation>
  + <https://www.eni.com/en_IT/innovation.page>