

Innovate Design Develop Create Value

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Rapid Impacts for AI Research Topics
12:-12:45 Panel Discussion
Thurs 5th September

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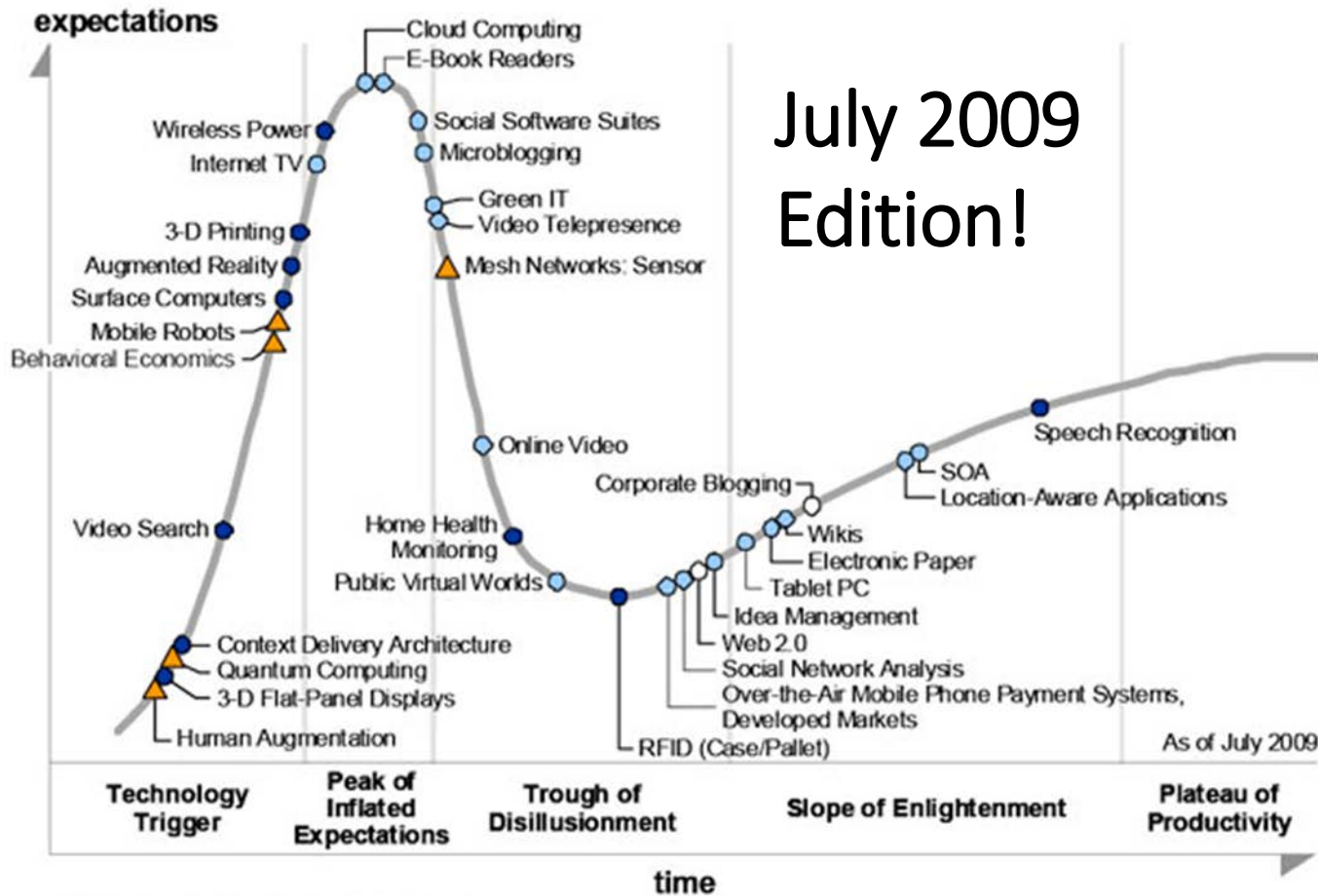
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Imagine a "Hype Cycle" for CCS technologies...

Figure 1. Hype Cycle for Emerging Technologies, 2009



Some industries have a very high "clockspeed". They move technologies from (almost) unimaginable to every day in the blink of an eye...

=> The CCS "clockspeed" is VERY LOW. It must be increased to accelerate research impacts.

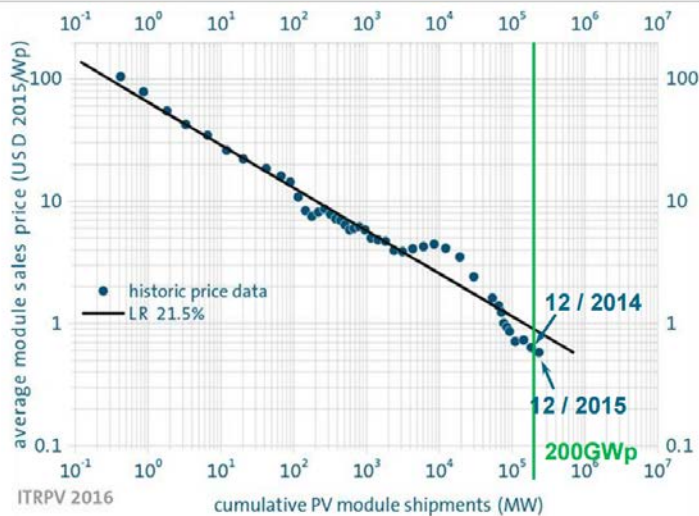
Years to mainstream adoption:

- less than 2 years
- 2 to 5 years
- 5 to 10 years
- ▲ more than 10 years
- ⊗ obsolete before plateau

Source: Gartner (July 2009)

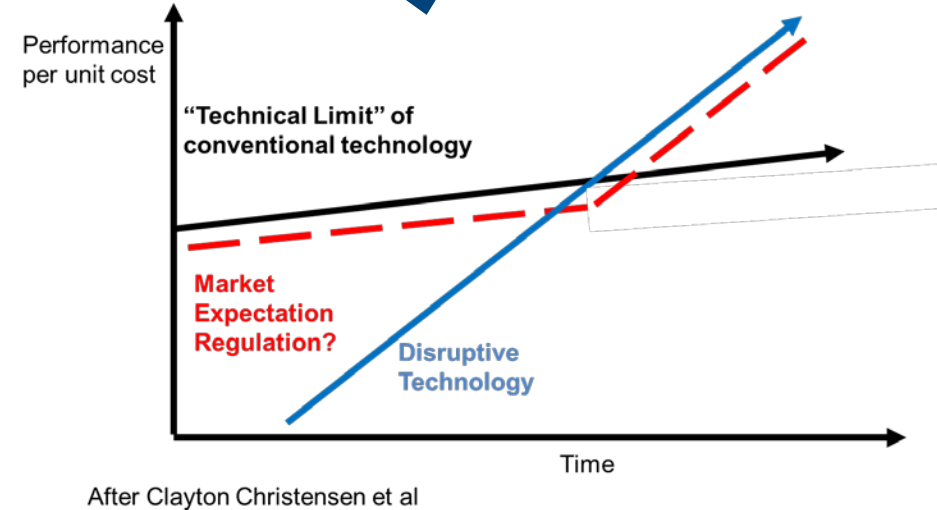
Clockspeed is linked to “learning curves” and “disruptive innovation”

Photovoltaic learning curve



Strategic R&D
Learning by Doing
Economies of Scale
Learning by Waiting

Most R&D is incremental – few projects truly disruptive. BUT the gradient CAN be influenced.



Occasionally disruptive innovation kinks a learning curve.

Open Innovation should be *Strategic*

Open Innovation (simplistically)

- Working with researchers beyond the boundaries of the firm
- Sharing IP related profits in some way

Some large corporates treat open innovation as a glorified suggestion box.

This is not strategic innovation – its merely “learning by waiting” or “shopping”.

For open innovation to be **strategic** the **problem owner** needs to:

- **Understand and Publish**
 - their problem / opportunity and any constraints
 - What success will look like
- **Share risk and profit**

=> This is a great framework for industry – academic collaboration



Some industries are fast because there's profit in being first.
Some industries need leadership to set the pace.

