

University 4.0: Which Changes for Teaching and Researching?

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Science, Knowledge (Information) [beliefs]

Humboldt's Model:

Unity between Science & Research

*"Universities shall treat
science as an open issue, to be
taught even without knowing the
impact on knowledge"*

- A model for a few
- 1970: 10% of the world population
- 2015: 35% of the world population

4.0: Recognize the challenge



Teaching & learning

- The digital revolution will impact on academic teaching as it already did on :
 - News and Media
 - Distribution of consumers goods
 - Music

Digital generation

- 1.500 hours per year facing a screen
- 800 to 1.200 hours per year in classroom

Teaching & learning

- General public no longer feels restricted to receiving education from the traditional providers
- Part of the Academic community complains on the decline in students capabilities

Back to the Ivory Tower ?



The missing element

- Vocational curricula

A triple effect: 1

- Empowerment of consumers in educational services
 - Faded borders between knowledge and information

A triple effect : 2

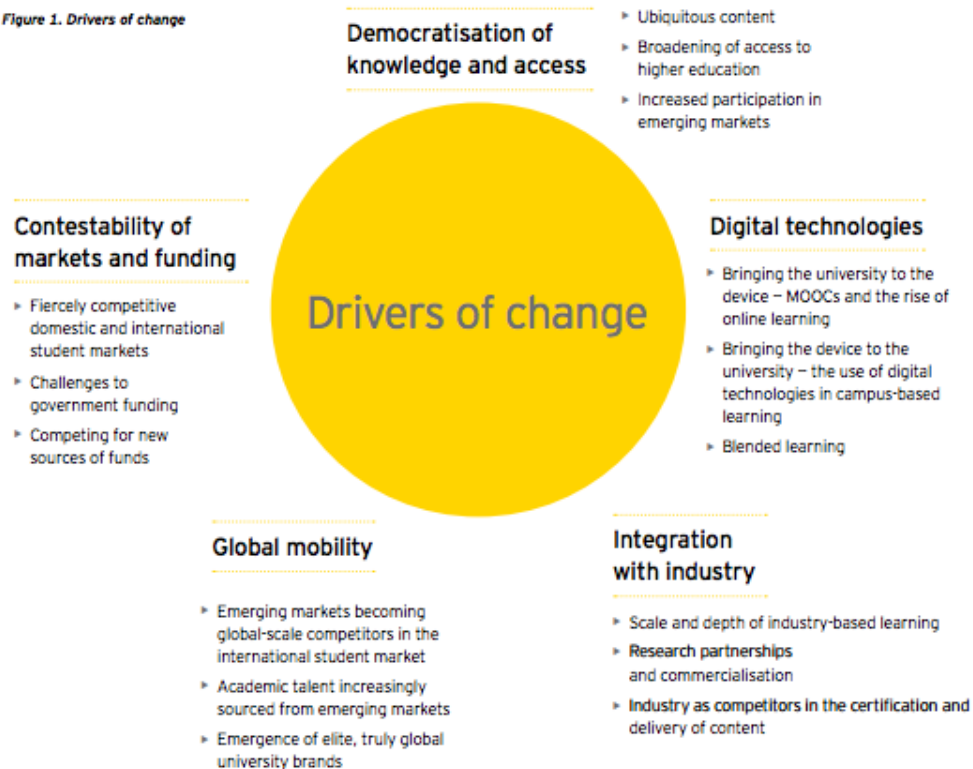
- **Reduction of fees**

- Radical change on the markets of educational services

A triple effect: 3

- Increased role of collaborative organizations against pyramidal institutions
 - Overcoming the top/down – bottom/up paradigm

Figure 1. Drivers of change



A set of critical questions

- a) How can we verify and evaluate a mass of information that is at our disposal, in an era centered on immediacy ?
 - The fiduciary issue

A set of critical questions

- b) Is the “fast time of knowledge” connected with the slower time of scientific research ?
 - A side effect: focus on applied research

A set of critical questions

- c) Is multidisciplinaryism challenging the statute of traditional disciplines ?
 - Serious gaming

Information is not knowledge

- The development of different “sciences” during 19th and 20th centuries led to hyper-specialization
- Today, we need to encourage a comprehensive approach to complex problems on a global scale
- Today, we must teach how to

A worrying gap



A recipe

- Strengthening the Bologna Process
- Boosting Public Engagement
- Investing in vocational curricula
- Supporting International mobility
- Sharing knowledge with innovative firms



[Fonte dell'immagine](#)