

FOUR THEMES FOR REFLEXION  
ON DIGITAL SOCIETY AND  
HIGER EDUCATION  
IMPACTS AND CHALLENGES

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# THEMES

- I. Knowledge Society and Digital Society (DS) “Change of epoch”
- II. Socially distributed production of knowledge and “digital transition”
- III. Impact of DS on HEI
- IV. New institutional and social agenda for HEI’s under the DS

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# I. Knowledge Society and Digital Society

## “Change of epoch”

- In a schematic way, the so-called "digital society" (DS) constitutes a higher stage in the development of the "knowledge society" while representing a qualitative change from the latter.
- This is because of the dominance of new technologies based on the digital revolution and the various capabilities generated with it.
- But mainly it represents a **radical transformations of social relations** with the configuration of a **cyber-physical society**.

# I. Knowledge Society and Digital Society

## “Change of epoch”

A radical transition in a very short time from:

Cloud Computing

to Internet of Things (IoT)

to Internet of Everything (IoE)

So, ....a “Digital Society”

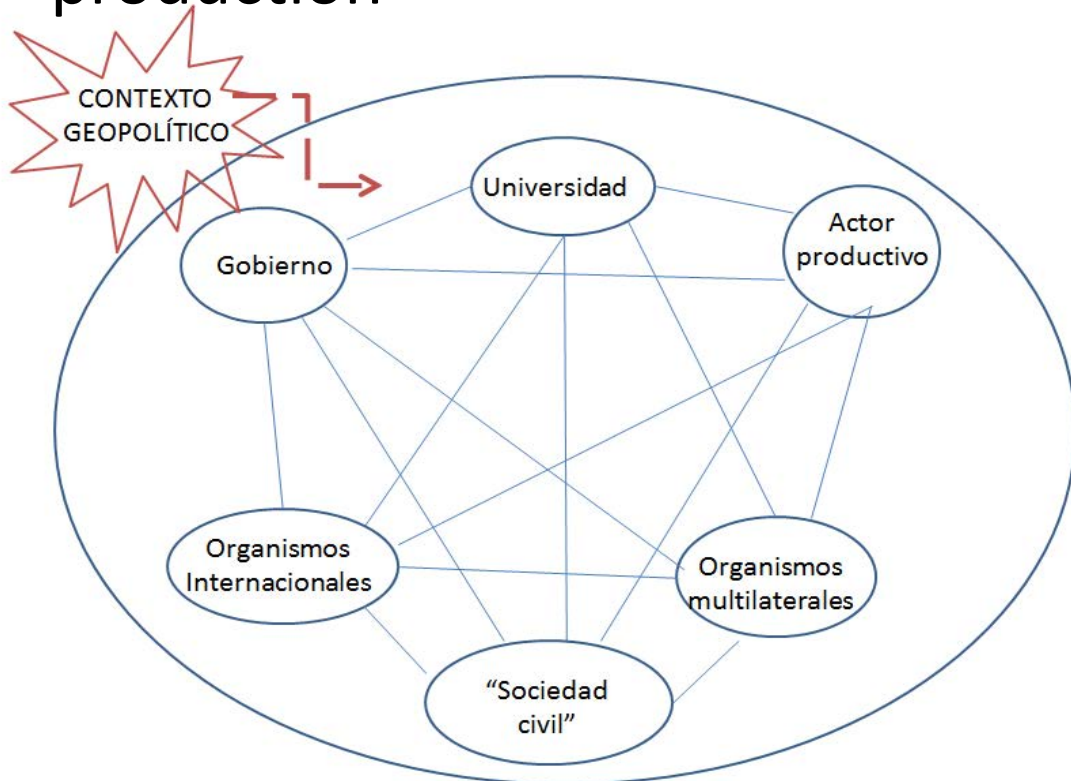
- Some features of this:
  - IoT will connect **28 billion "things "**to the Internet by 2020
  - **Half of the world's population** connected to the Internet
  - **Extraordinary power of few major technology companies**; increasing interrelationship between human and artificial intelligence

## II. Socially distributed production of knowledge and digital transition

- The knowledge society developed the production of scientific knowledge towards socially distributed mode (Gibbons)
- The development of digital technologies exacerbated this tendency and generate new set of participating social actors in the knowledge ecosystem.
  - private stakeholders for business purposes (technological companies, private universities),
  - the state with new roles in public higher education
  - traditional universities faced with a change due to the loss of their social monopoly of the production of scientific knowledge.
  - New social actors

## II. Socially distributed production of knowledge and digital transition

Ecosystem of social knowledge production



- This creates the problem of the governance of the production of knowledge in the social knowledge ecosystem.
- Some evidence is given by *fake* news, cybersecurity problems, etc.
- The oligopolistic power of Google, Facebook, Amazon

# III. Impact of DS on HEI

Digital society has a strong impact on HEI's, that demands them radical changes

- Distance learning “relocate” teaching activity
- Open educational resources modified the means of knowledge circulation
- Learning analytics enables individualized and adaptive learning
- Changing dynamics of occupations demands LLL offer from HEI
- Big data and artificial intelligence offer new tools for research activity
- But also the HEI's have to learn how to interact with the “new millennials or after” students, understand its ways of social relations and its “digital thinking”

# III. Impact of DS on HEI

- Those impacts creates huge problems to traditional ( and not so traditional) universities due they were created under other socio-historical circumstances
- So, they confronts a new and complex situation that will have to be managed as what is call as a “digital transition” towards the digitization of higher education
- This will be (and already is) a very relevant topic for the development of the higher education in general and the HEI’s in particular



# IV. New institutional agenda for HEI's under the DS

- HEI's must change to achieve a new role on education, science, technology and innovation in digital society
  - Rethink the concept and role of knowledge with artificial intelligence
  - Create new paths for education, research and dissemination based on new technologies
  - Reorganize its institutional configuration and ways of government in relation with conditions created with "social networks"
  - Reconfigure learning activities in a more flexible and individual direction

# IV. New social agenda for HEI's under the DS

Given the current changes in the society, universities must redefine their role in social life.

This means a deep commitment to help the overall transition to a cyber-digital order that is favorable for the whole of society and the Planet.

- This implies a complex agenda of issues to be addressed by universities:
  - citizenship and democracy
  - environmental sustainability
  - food security; organizations
  - social inclusion and poverty
  - responsible data science
  - cyber security.

## IV. A new social role for HEI's under the DS

HEI's can be leader in the “social dialogue” between ecosystem actors for a transition to digital society with inclusive and sustainable social development vision

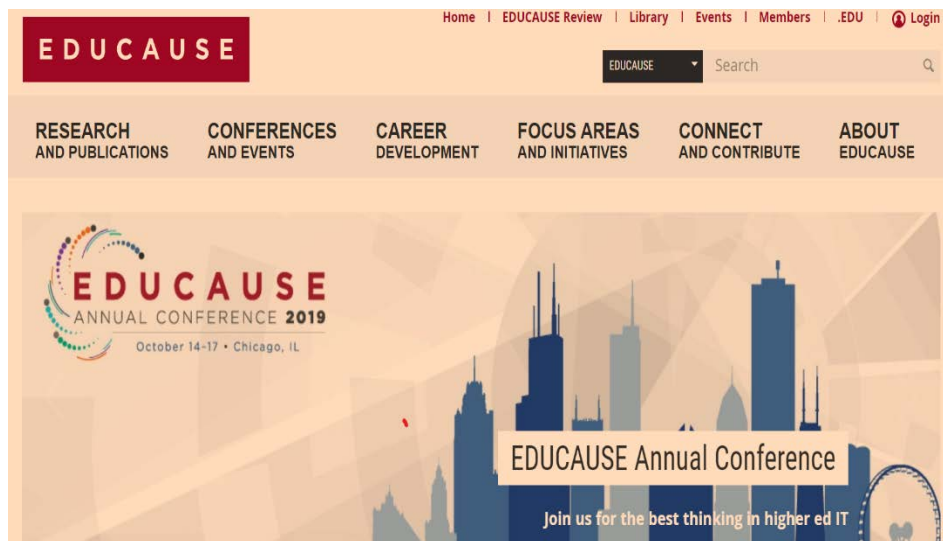
- To create new ways of interacting with different actors so that new modes of production, circulation, appropriation and social application of knowledge through cyber- physical systems are fulfilled according to the well-being and development of Communities

# A very preliminary conclusion

**“HIGHER EDUCATION REFORM AND DS” IS VERY COMPLEX PROBLEM iii**

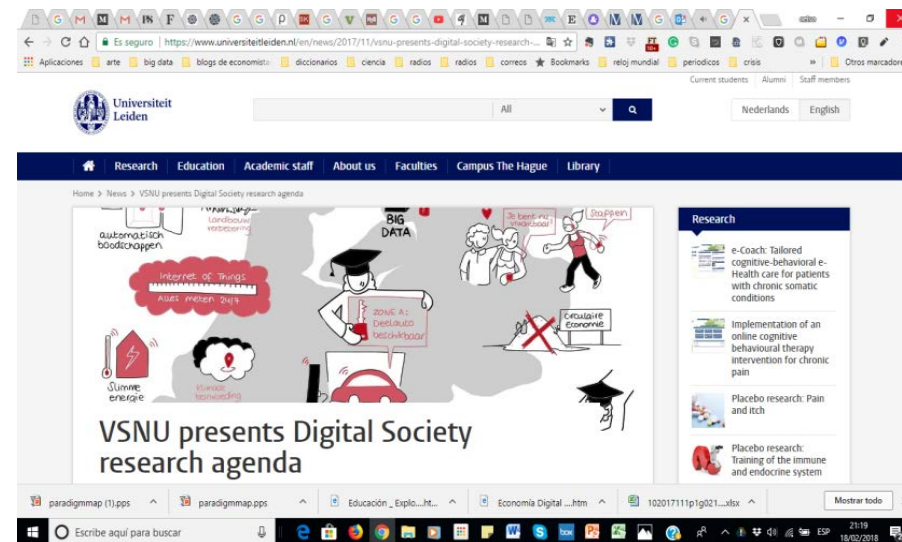
Fortunately there are several HEI's and associations that have been working on on both subjects of the agenda since long time ago

## INSTITUTIONAL



<https://www.educause.edu/>

## SOCIAL



<https://www.thedigitalsociety.info/>

# A very preliminary conclusion

## In general we can say

- The defy of the HEI's under the DS are equivalent to the problems of other social actors in this “change of epoch”
- HEI's, Firms, Governments, Workers and other Social groups are confronted to a “digital transition “ toward the unknown future of the “digital society”
- So, it seems possible that given its particular condition, HEI's can promote some kind o “**Social Dialogue**” with all the actors to try build a collective guidance for this historical change

**iii THANKS iii**

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