Higher Education in the XXI century: challenging everything and also the library role

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Erasmus Librarian Week

University Fernando Pessoa

29th June 2016

Erasmus Librarian Week
University Fernando Pessoa, Porto

- Title
  Higher Education in the XXI century: challenging everything and also the library role
- Abstract
  We are already living in a new time. Our time makes both the digital and society move from an era where institutions and people have stable and fixed roles (at least most of the people, most of the time). Considering the context of a networked society and on the verge of the so called digital transformation, both universities and their library services need to provide best answers to incoming challenges. The talk will follow a discussion of the ways in what such transformation can evolve and what are some of the main challenges to face.
- Date
  29 July 2016

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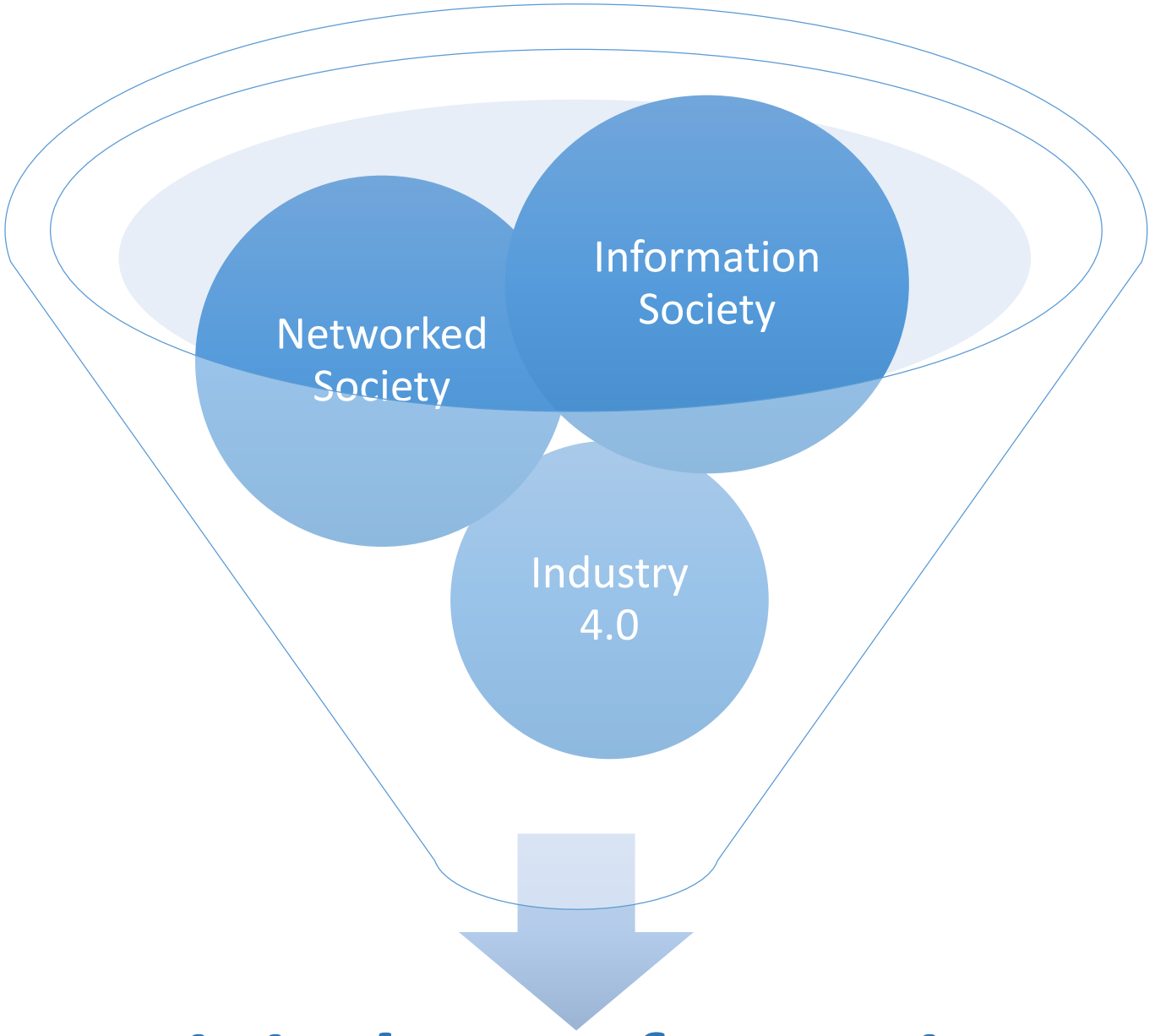
- Luis Borges Gouveia is a Associate Professor from Science and Technology Faculty, University Fernando Pessoa.
- He is the coordinator of the PhD program in Information Sciences, Systems and Information Management specialty.
- He holds a Aggr in Industrial Management (UA, PT), a PhD in Computing Science (ULancs, UK), a MSc in Electronic and Computers Engineering (FEUP, PT) and a BSc in Aplied Mathematics (UPT, PT).

We are on move to something different...

http://baylorbarbee.com/blog/how-to-change-the-world/



Digital transformation

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Information Society

A society that uses as its main source **information and communication technology** to support information interchange manly in **digital** format and the **interaction** between individuals and organizations, based on practices and methods on **constant evolution** which made change as the new constant (Gouveia e Gaio, 2004)

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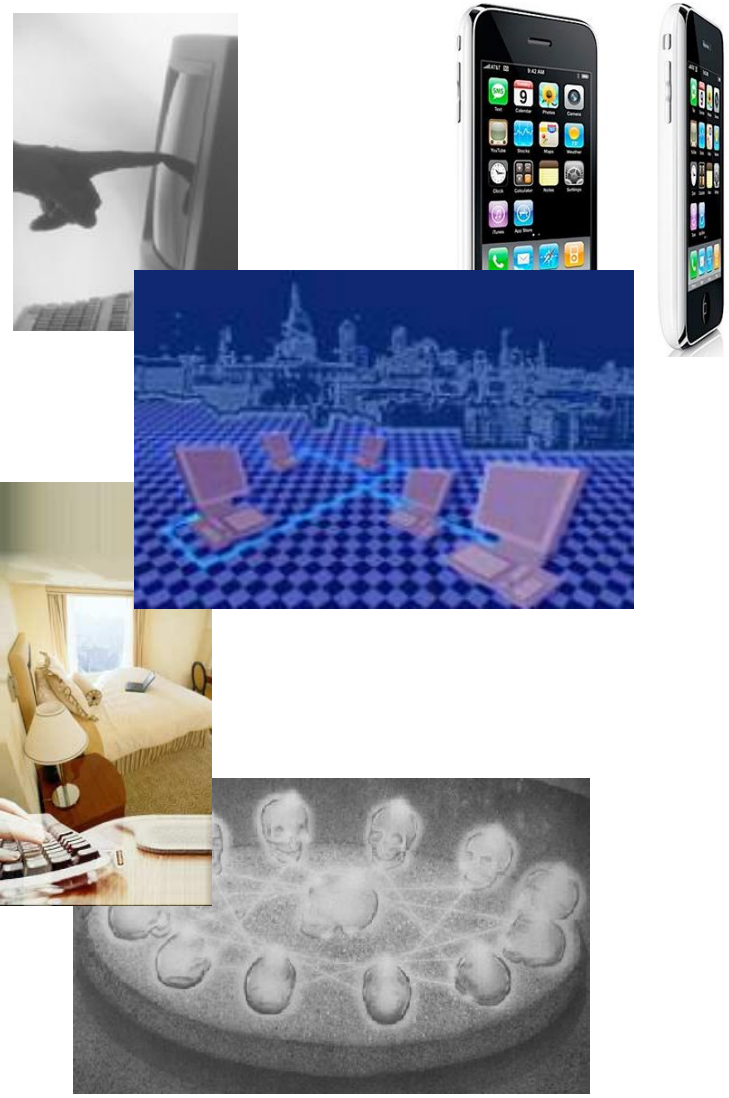
Information Society

Intensive use of information and communication technologies

Growing use of the digital

Networked based organizations



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Information Society

Intensive use of information and communication technologies

infrastructures & access

Growing use of the digital

processes & training

Networked based organizations

from Command & control to share & regulation

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One world idea

Now…

Information Society

- Intensive use of computers and networks
  (from know how to use to know what to do with them…)
- The information that counts is digital
  (information is not important anymore, and by its own do not add value…)
- The organization that counts is the network organization
  (hierarchies are a simplification at a given moment of more complex relationships…)

What this means?

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Two main issues

- **Sustainability**

How I can grant my freedom or how the generated value covers the related cost/effort*
**(value: economic, social, political, personal)*

- **Sovereignty**

*How I can grant my identity** or how I can be recognized as myself and be what I want/can be*
***(brand: person, enterprise, nation)*

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Networked society

- Broad set of phenomena that take place in the second half of the XX century at a **global scale**
  - The designated sucessor of post industrialization; information society; post modernity and/or globalization
- It defends a **network centrality** that replaces hierarchies as the main organization mode
- It defends the growing use of the **digital and technology mediation** as the **basic infrastructure** for almost exclusive human activity mediation

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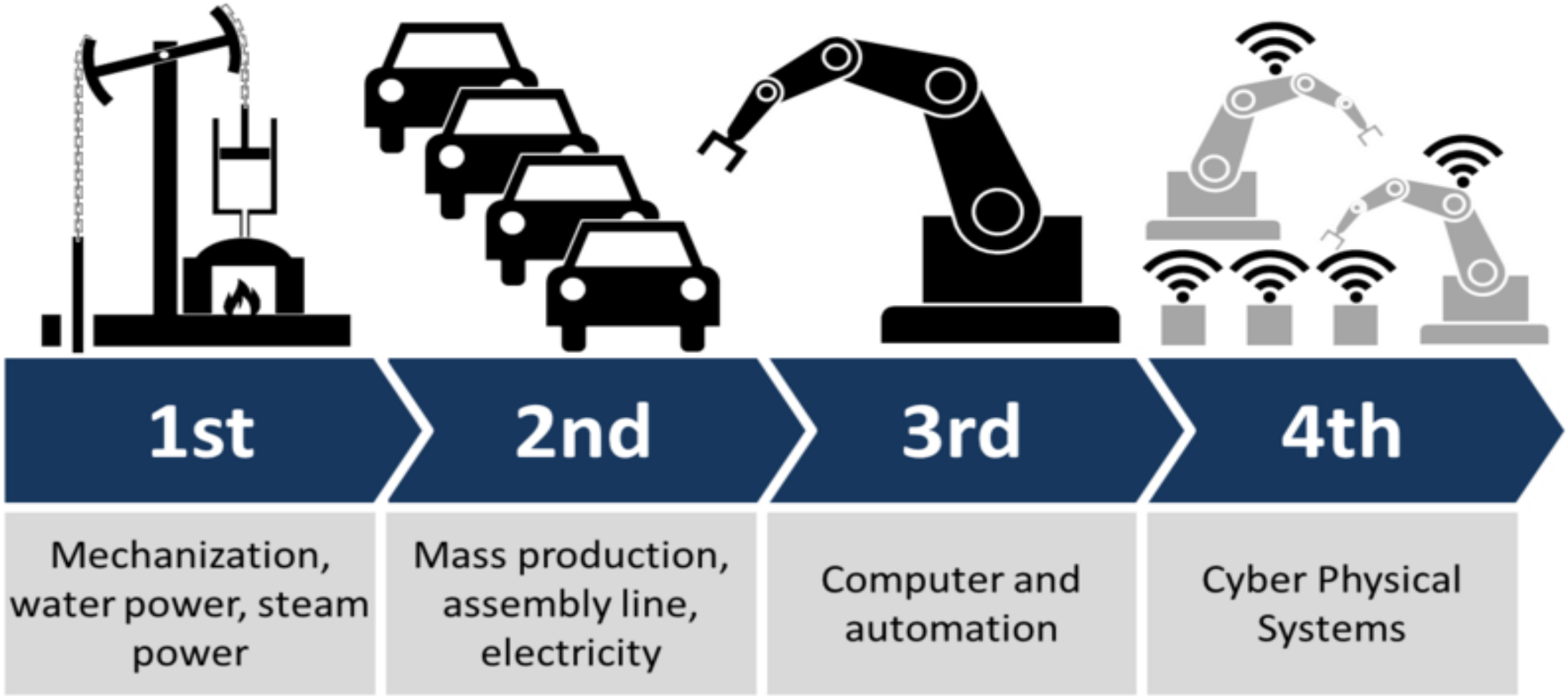
Networked society

- In a networked society, both power and the lack of power are a function of **the access to networks and to the control of their flows** (Castells, 1998)
  - Being those flows of resources, informational or finantial
- Network arise as the access portals where the opportunities are
  - Outside networks, survival is increasingly difficult (places na abstract threat to everyone)

Networked society

- Emergence of the **spirit of informationalism** as ethics founder for the company network (Castells, 1996)
  - product of many cultures and projects of the various actors in the network, resulting in **accelerated organizational and cultural changes**
- This dynamic is a **force with real impact** that informs, strength and shape economic decisions and strategy to the network (and society)
  - It manifests itself as an accelerated **creative destruction** by means of digital and electronic devices applications

Fourth wave? (era 2.0 or industry 4.0)



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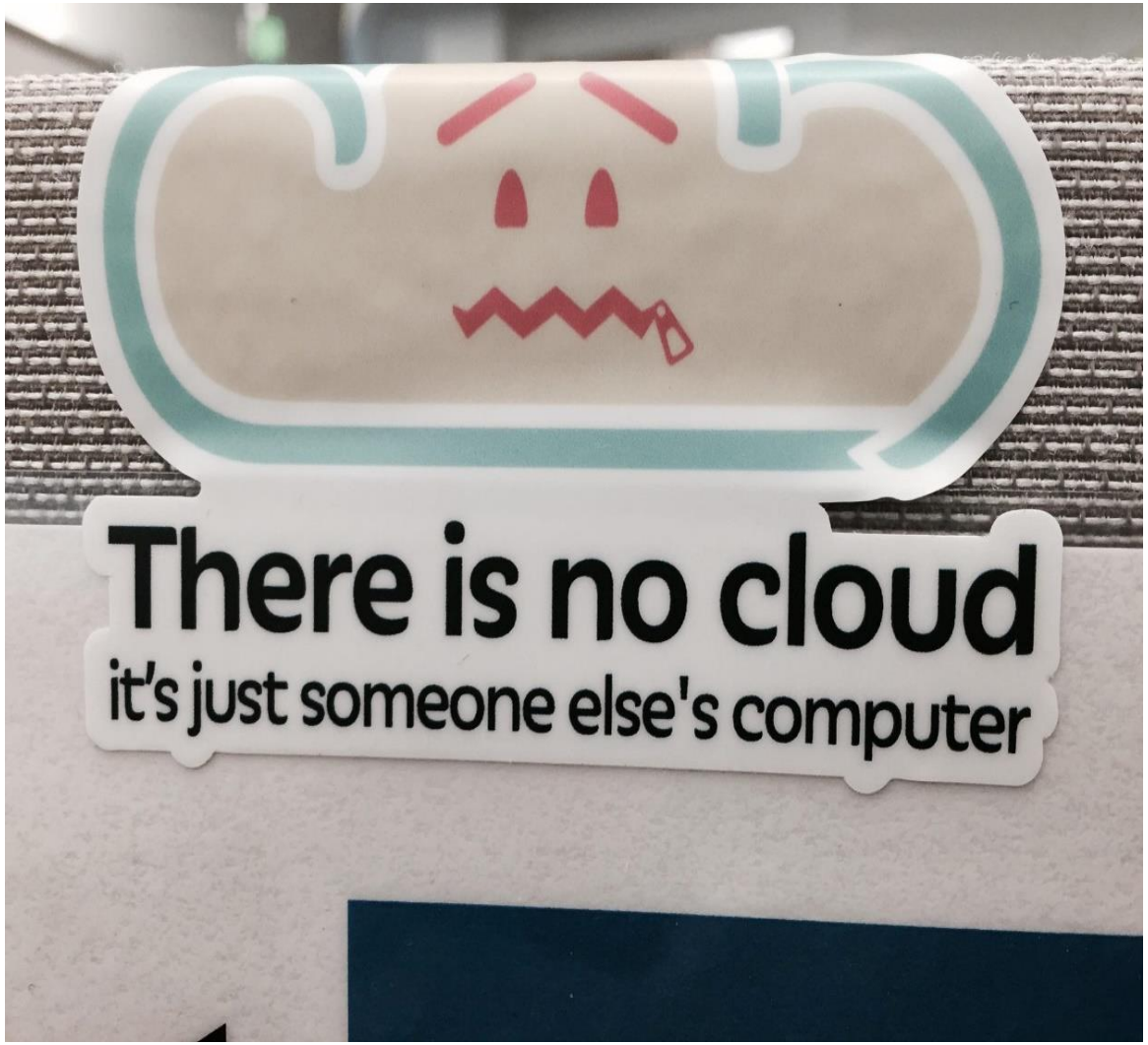
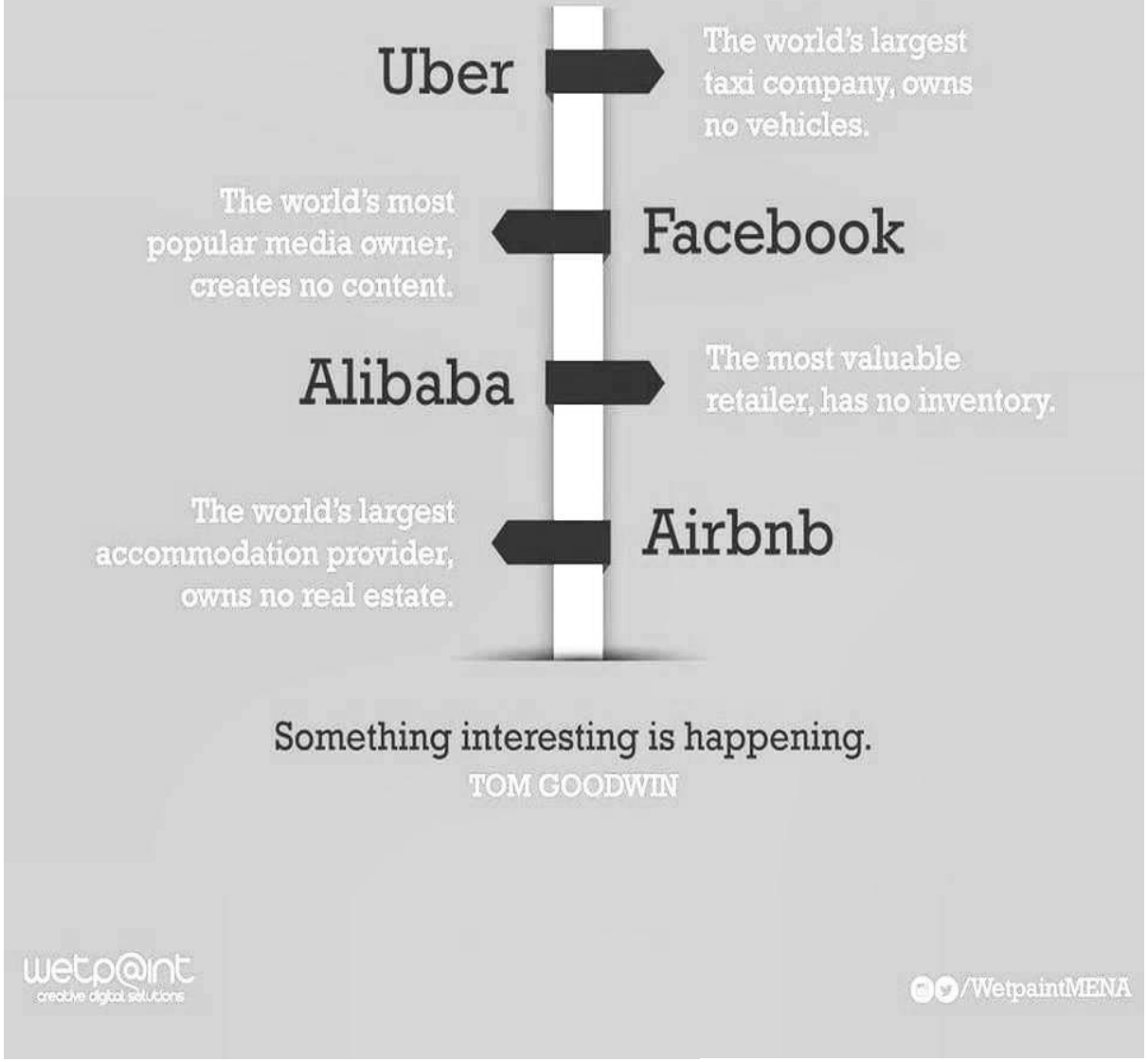
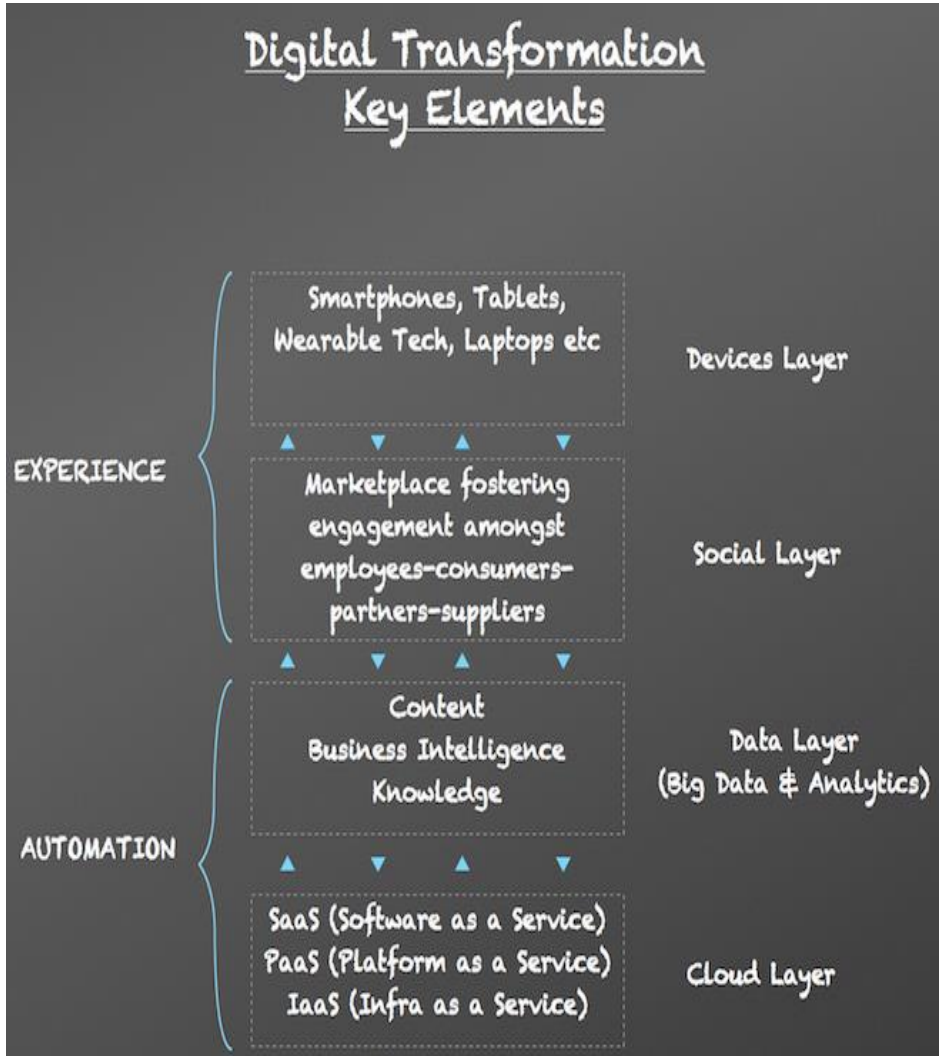
The new reality





Digital transformation

- Changes associated with the use of digital technologies in all aspect of human activity
  - Digital transformation is the third phase of digital adoption (the first was digital competences and the second, digital literacy)
- Transformation because:
  - New innovation types and creativity that leverage traditional methods
  - The work force must suffer a transformation:
    - From analogic mode to digital mode
    - From survival mode to value production mode



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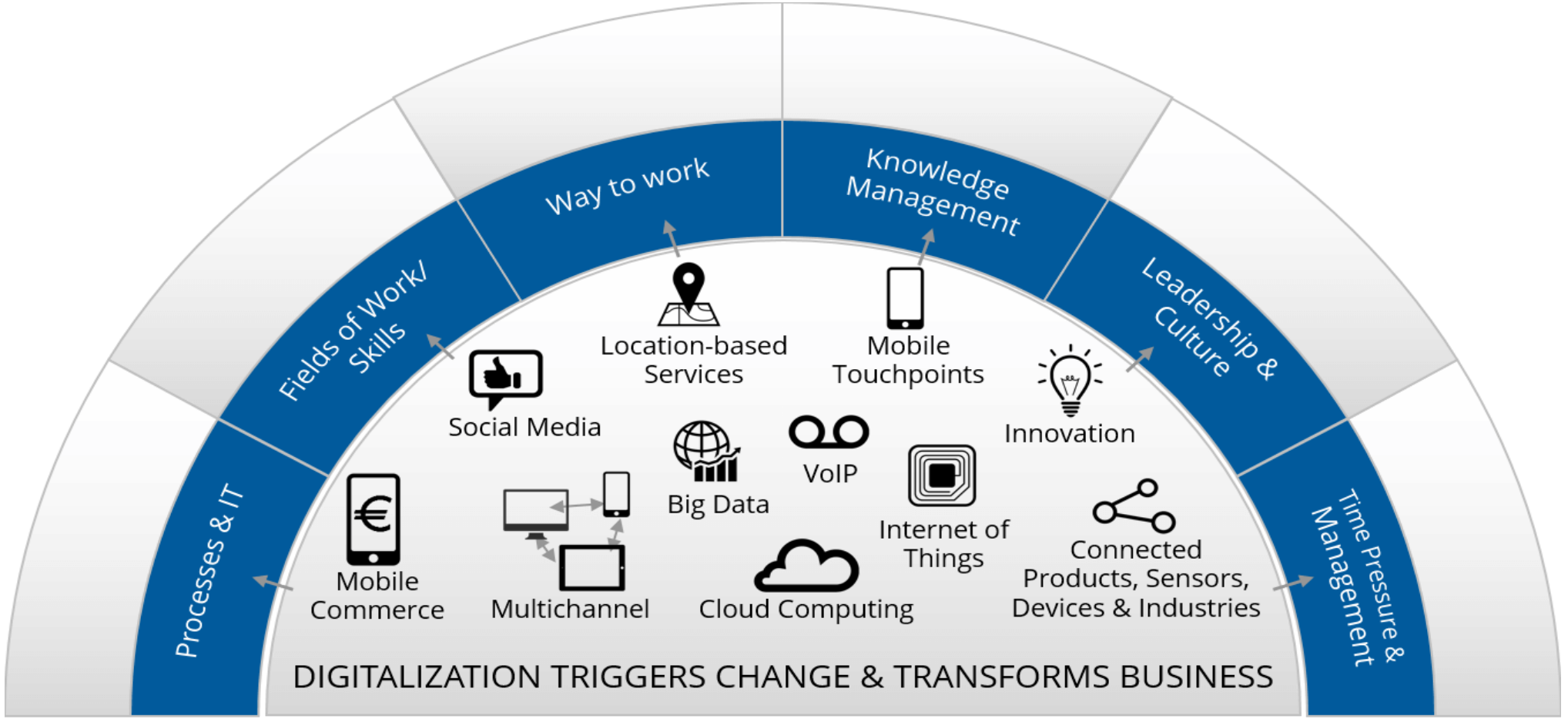
Digital transformation as the second wave of impact on global digitalization, after Internet



http://4-advice.net/digital-transformation/

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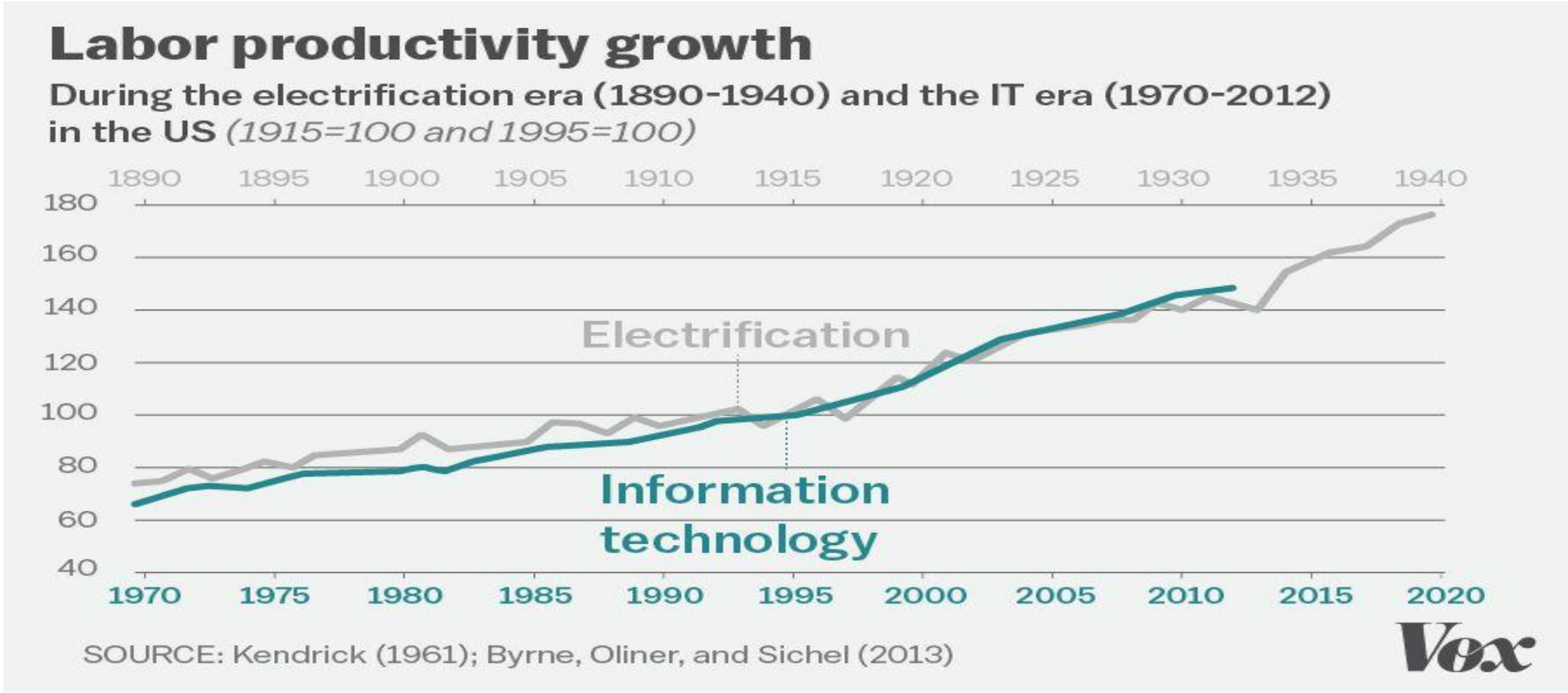
Digital transformation

- Five topics to consider
  1. **A clear strategy and direction**: which produts / what prices and what operation model
  2. **A vision of what clients want:** which channels to use / how to treat different clientes / integrate analogic and digital experiences
  3. **The little things and details matter**: are the data up to need / is there an infrastructure to support the effort / which are the functional and non functional requirements
  4. **Requirements management is vital**: are all relevant requirements being considered / is the decision making considered in the requirements / who is the owner, are requirements documented and tested
  5. **Involving and integrating *stakeholders***: are the right people being involved / do people know what they get / change management

Is this really new and never experimented?



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Which is the digital force to change?

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the DIGITAL is being a ...

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Collective journey

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Not always easy, almost never without pain…

- Highly connected
- Operates in a fast pace
- In constant change
- Workplaces in permanent change (also recreation ones...)
- Do it now, in any place, with available technology, not taking time and with resource efficiency
- Action must be
  - Collaborative and with paticipationof all
  - Requires life long learning and self learning
- Be prepared to:
  - Share, cocreate, be criative, reuse, be always connected with high mobility, descart

Implications

From the analogue world to the digital world

- **Learn**
  - analogue: memorize to learn
  - digital: forget to learn
- **Work**
  - analogue : take time to work
  - digital: work without take time
- **Teach**
  - analogue : organize, structure and transmit
  - digital: curate, tell ands animate

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Government, and governance

- **Governance** (1995)
  - A direction of the government is no longer sufficient
  - It is necessary another way to rule
- The structured process of direction oriented to the collective action based on the **cooperation**
  - A participation product of all (dynamic and negociated between *stakeholders*)
  - In governance there is no more a central actor
  - Such process requires the balance of interdependencies, integration, co production, and co responsabilities

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Time, rhythm and learning

http://giphy.com/gifs/loop-perfect-26B5FNH5CTL36a5ZS

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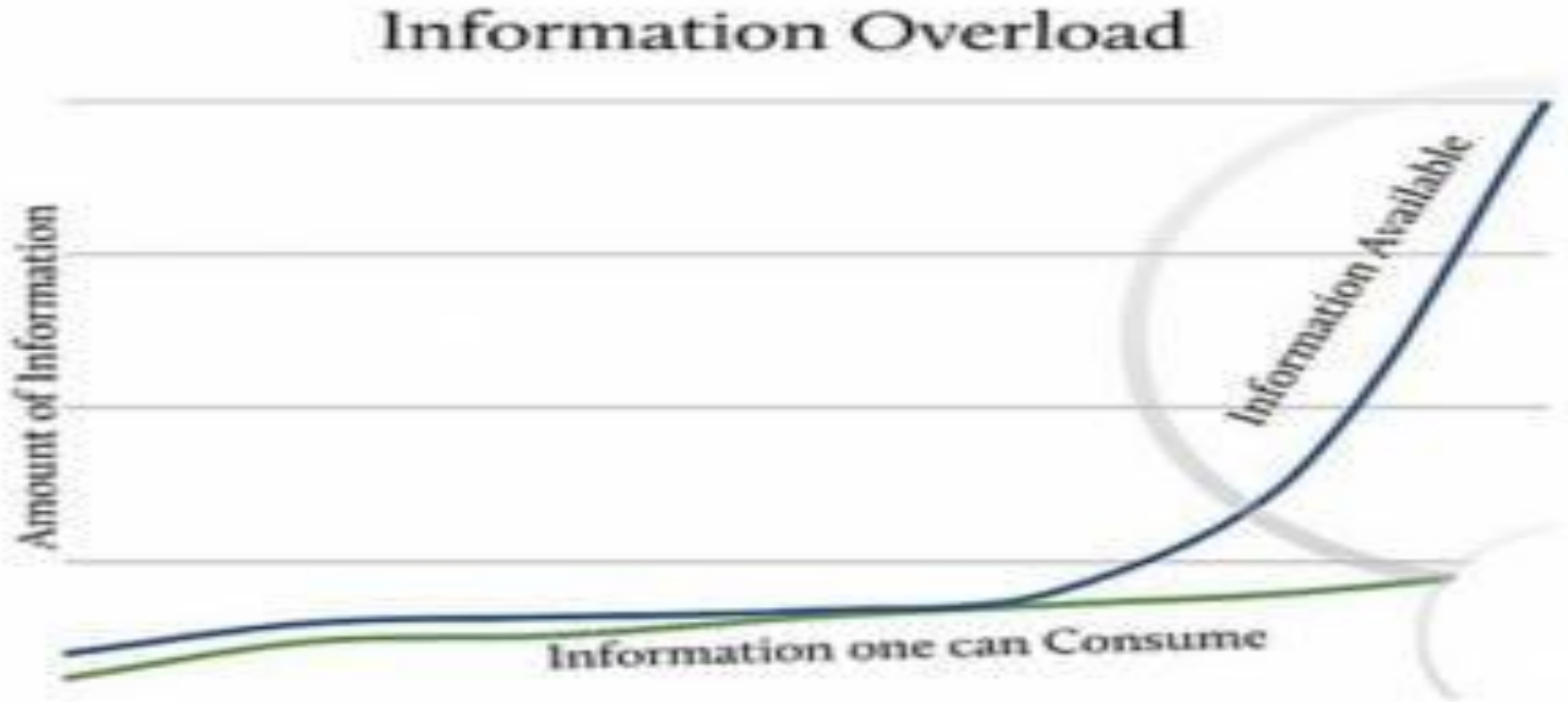
Deal with information overload



A new empire to attention

- About what?
- About who?
- Why?
- Whem?
- With what cost/effort?
  - The object reflects the interest...
  - The interest focus the attention

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…and the university & university libraries?

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Recap on Information / Knowledge / network society

- Growing importance of **information** and its **flux**
  - Who better dominate the organization and information prodution, become more able
- Growing importance of **digital mediation**
  - Who better dominate the technology and have human resources with the right literacy, become more able
- **Fast and perpetual cycle** of:
  - Potencial – capacity – change – adaptation
  - Keyword: sustainability

The University

- An higher education **institution** with the ability to **teach and research** and to concede **academic degrees**
- The (physical) **space and buildings** of the institution
- The body of **students, teachers and staff** of the institution

The university dilema

- **Dependency** of the university of sustainability and finantial capital needs…
- **Irrelevancy** of the university activity on defining its agenda for research and development

- **Puts into question** the university autonomous development as a social active institution

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Crisis

- **Of values**
  (understood as what is common and important to be defended and preserved)
- **Economic**
  (how to assure sustainability and existant legacy)
- **Of identity**
  (whom to represent, what is its vital space, the territory, specialty, language, culture, etc.)

Change

Excellent opportunity to **undertake**!

- Drive is not technology…
  - *e-learning* is important
  - …even as its (disruptive) applications may have real impact on the things are run (e.g. mooc)

  - But as in many other technologies
    … almost every thing stays the same

The same classrooms…

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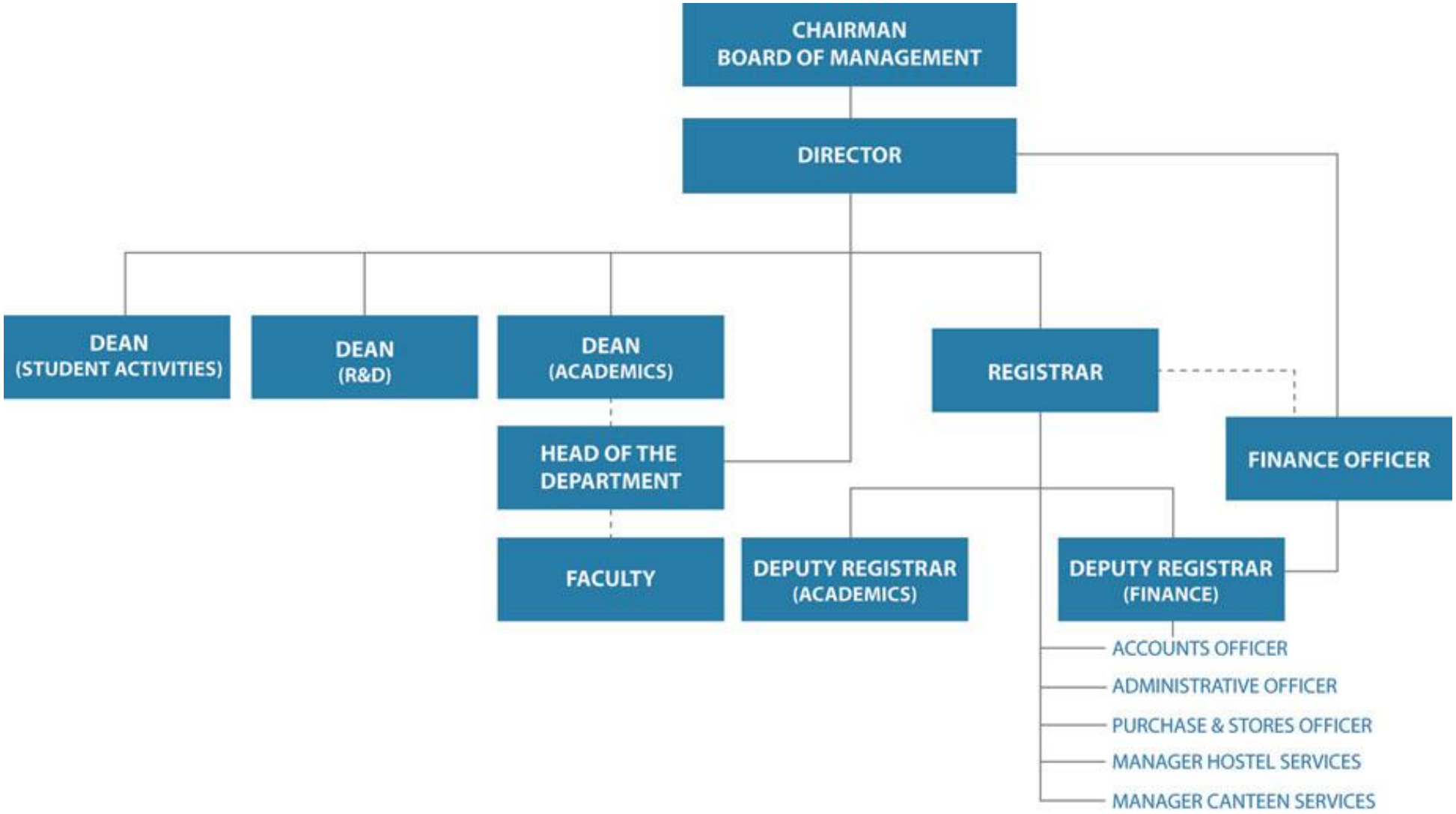
The same labs…

Essentially, the same university organization…



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Essentially, the same roles to students, teachers, and staff

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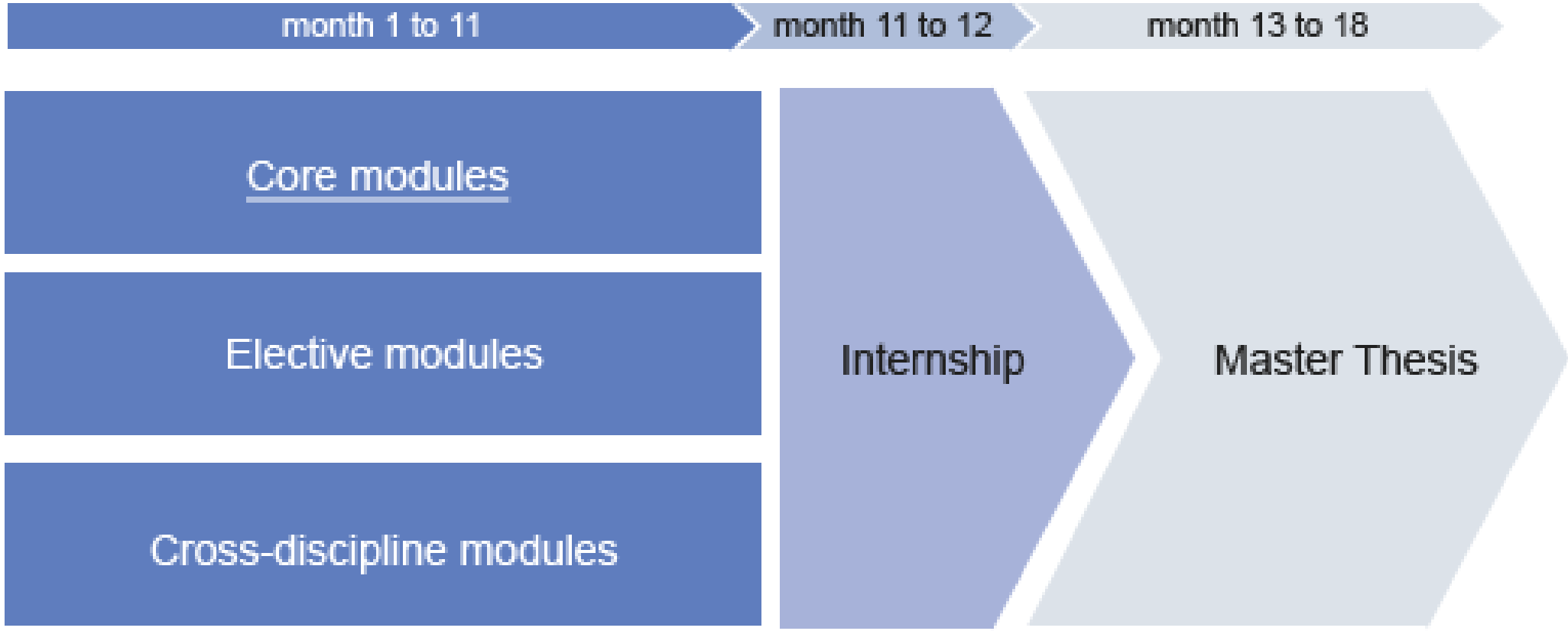
Essentially, the same knowledge organization and its teaching



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The university

- From the house of knowledge to the **house of actionable memory**
  (the one that allow to make old and new things)

- **Space of discovery and experimentation**, where it can be possible to create knowledge in a **safe environment**
  (legal, environmental, economic and political – *safe house*)

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The university

- **Dialogue space** and of **personal maturity**
  (growing and personal transformation)

- A place where we can **learn to learn** and where we can purchase an **humanistic culture**
  (create an awareness and human dimension)

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The university

- **A confrontation place** of ideas and the **search for truth** (turn knowledge search in an human and nice endeavor, interacting with those who know)

- Place where it is possible to find **help, support, resolve problems and learn more** about something (social value and utility)

Do we still need universities?

YES! … but probabily diferente ones…

- Current **modern universities** appeared in the XVIII Century and their models where consolidated in the XIX century.
- From elites to massification in the XX century (60's) to the enterprise-university (90's)
- Nowadays, we need to rethink university to a post industrial society that places new challenges, with new causes and different people to fulfil their needs

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Opportunities

- Rethink university, means…
  - Rethink the **interlocutors roles**
    (students, teachers, staff and others…)
  - Rethink **spaces**
    (both physical and virtual, and also class, social and support spaces)
  - Rethink **practices**
    (supportive, educational and motivational)
  - Rethink **tools**
    (from the chair to the digital device)
  - Rethink the **business model**
    (who pays what… society, enterprises, students, …)

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A lot to do!

To **little** time

With (very) **low** budget

There are **many** competences

Many diversity and potencial

Required **creativity!**

… and **guts to do it!**

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The University in the XXI century

- It will **diverse**
  (many models and types of being an university)
- It will be **alternative**
  (assuming being the place for discovering and truth)
- It will be a **place of social value**
  (produce something that have imediate and social return)
- It will need to be **collective, etiva**, **plural**, but respecting tradition, **knowledge and quality**
  (respect comunities and grow with them)

- It will need to **make options and have a brand**
  (what he knows to do well and distinguishes)

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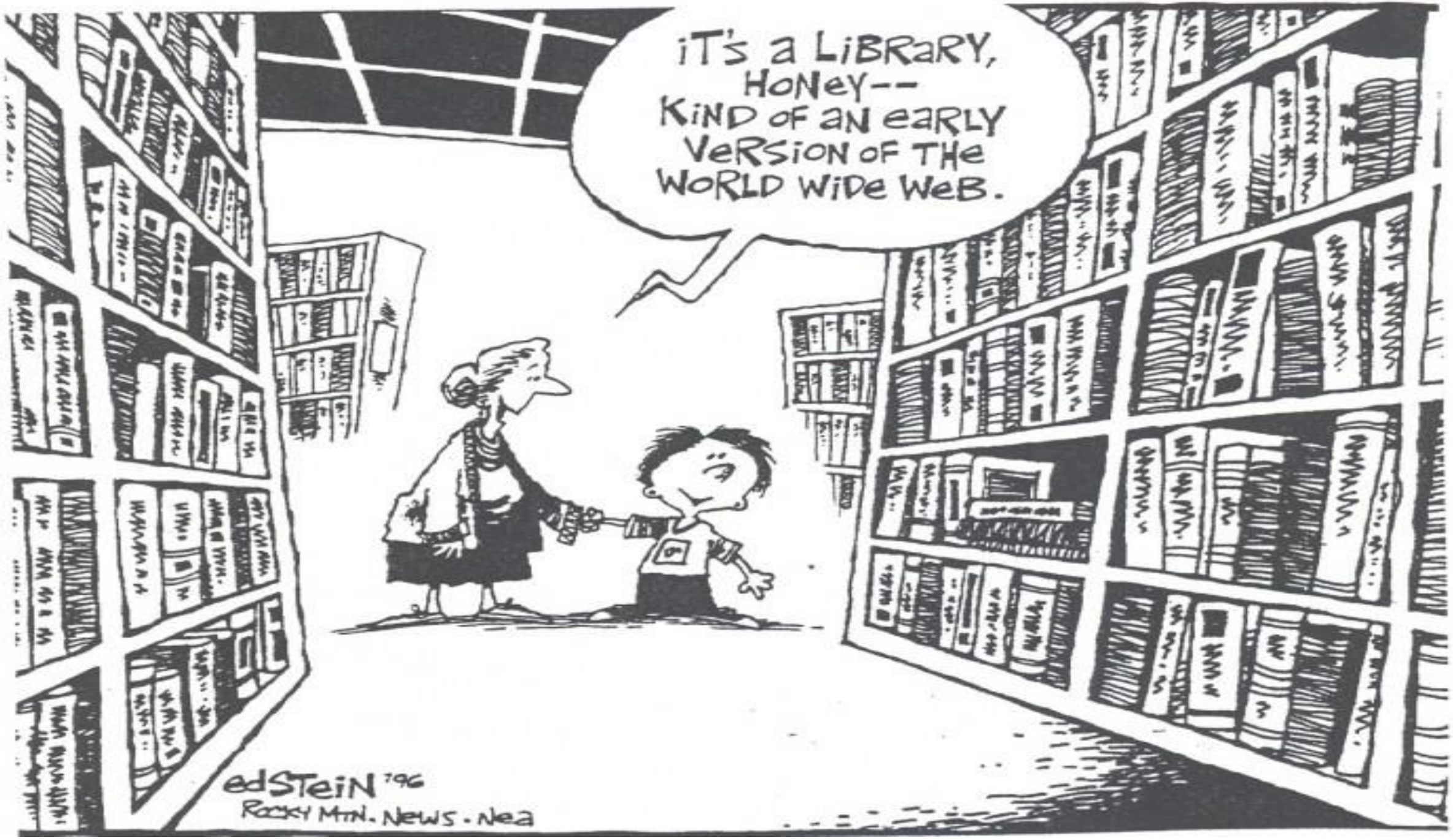
Library… starting issue

"As physical books give way to computers and mobile devices, in what time, the library should stop being a library and start being something different? "



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Libraries and their transformation

- **Libraries are not just about books**
  In fact, they never be…
- Libraries exist to allow **information access**
  Until recently, book were one of the most efficient ways to transfer information and knowledge between people and time
- There are **17 basic information approaches** that challenge the role of books (Thomas Frey, 2012)

17 categories for day to day information use

- Games and videogames
- Digital books (e-books)
- Audiobooks
- Journals
- Magazines
- Music
- Photos
- Videos
- Televisions
- Cinema
- Radio
- Blogs
- Podcasts
- Applications and mobile applications
- Presentations
- Courseware
- Social networks

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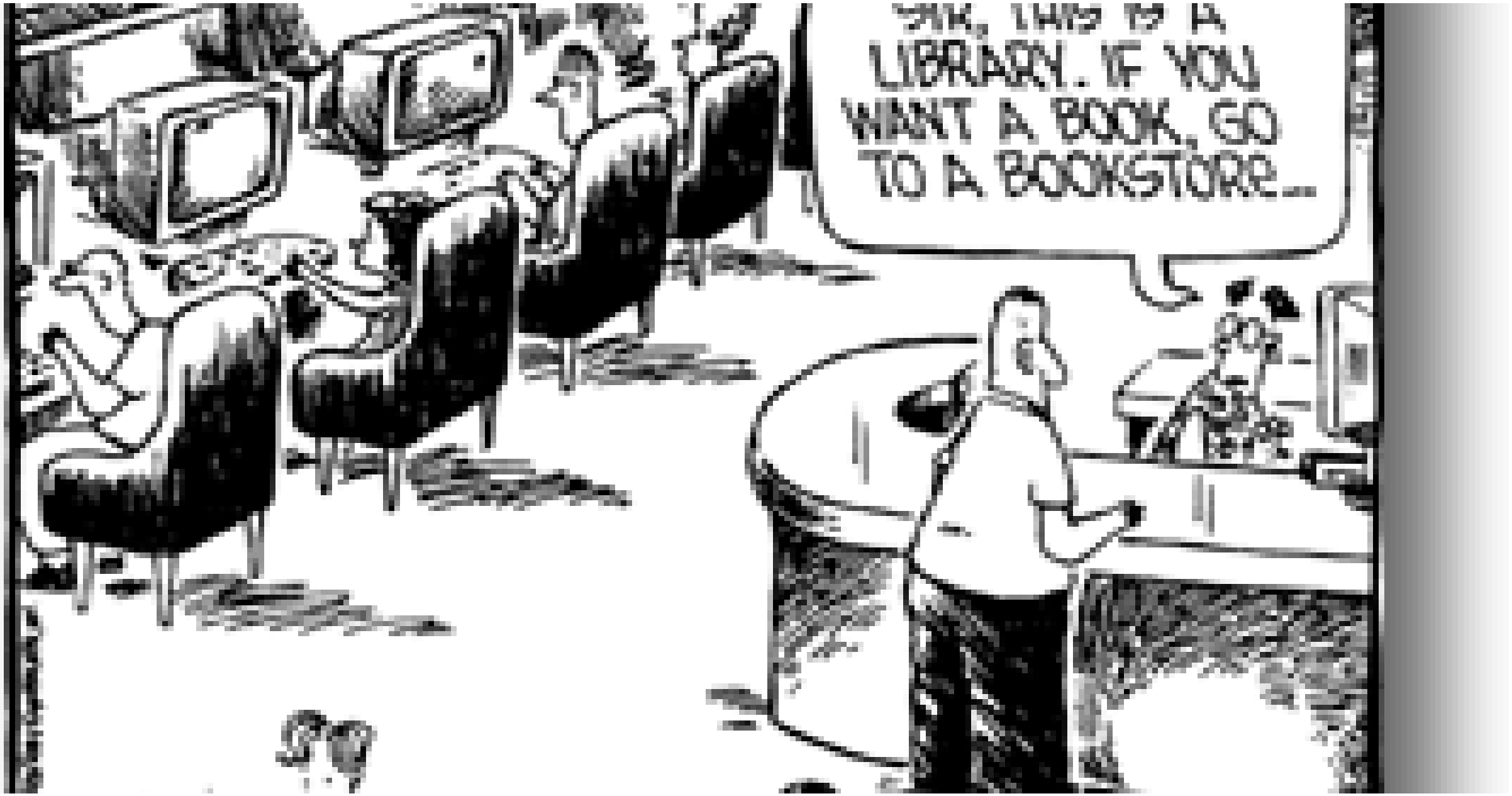
17 categories for day to day information use

- They are not direct book substitutes but alternatives and can erode the main role of books
- Each of the mentioned categories must have its place in the future library
  - It already has, in fact… (e.g. media libraries)

- The future of books (even their fading) has little relevance to the impact of of which they will be the library operations

But… for those who love books…



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5 main transformation drives

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1. (one)

DIGITAL

Use of computers and networks (dematerialization)
Resulting in the information convergence of:

- formats (transcoding, transmedia)

- contents (representation, multimedia)

- treatment, storage and communication (integration)

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2. (two)

Sustainability

Who does (producers)
Who pay (financing)
What are the benefits (return)
Balance, maintenance and adaptation
Who uses? What are the services?
Criteria of effectiveness and efficiency

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3. (three)

Knowledge

University of XXI century

Culture versus knowledge

Culture versus science

From stock to knowledge creation

From preservation to the applied knolwedge with social value

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4. (four)

Networks

Relate and share

Colaborate and interact

Participate and reuse

Being in a 2.0 and/or 3.0 environment

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5. (five)

Semantics

Catalogue
Organize
Anotate
Associate
Integrate
Reuse

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Two open questions…

Within an information world where Google apparently offers everything, what is the role for the traditional library (or even digital)?

In a library environment that is increasingly approached the online than the print resources, what is the role of the academic library in the heart of the university campus?

http://education.guardian.co.uk/librariesunleashed

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