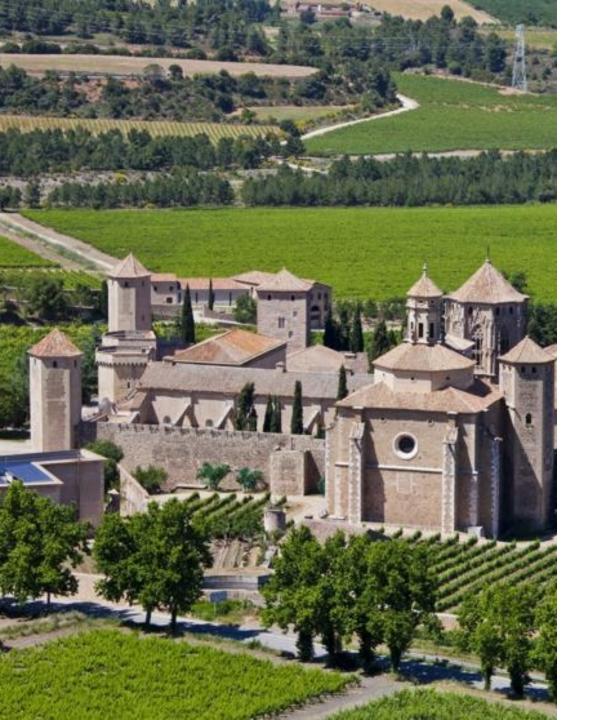




Defining our place in the future.

The transforming role of IT and IT leaders in Higher Education





Unique retreat place: Poblet Monastery, Spain.





The meeting aimed to bring together CIOs and IT Leaders of Higher Education to share experiences, approaches and IT knowledge to discover what will be our place in the future.











The Speakers

Digitalisation and disruption: What does it mean and how do you deal with it?

Espen Andersen



Espen Andersen: Associate Professor with the Department of Strategy at BI Norwegian Business School and Associate Professor at the Department of Informatics, University of Oslo. He has done research on topics such as technology strategy, mobile business, electronic commerce, knowledge management, digital business strategy and CIO-CEO interaction. He is one of two Directors of the BI Center for Digitization and a former Director of the BI Center for Technology Strategy.

DIGITIZATION

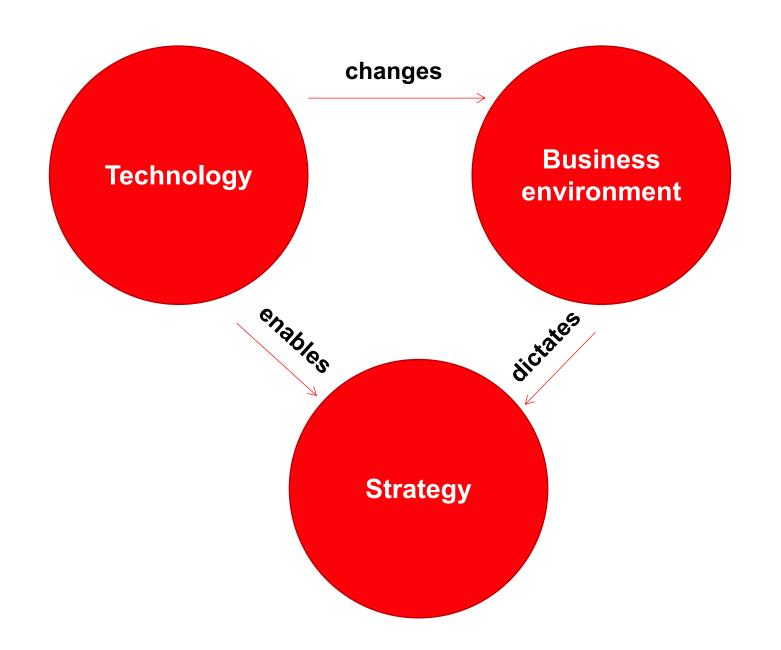
The conversion of products to digital format and the concomitant inventions that ensue.

DIGITALIZATION

The innovation of business models and processes that exploit digital opportunities.

DIGITAL TRANSFORMATION

The systems-level restructuring of economies, institutions, and society that occurs through digital diffusion.



- **Disruptive innovations** are those where the current leaders prefer to leave
- Changing technology changes what we do
- University market is over ripe for disruption, that will be technology enabled
- As an academic executive, what can you do right now?
 - 1: Ask ourselves: Do you have customers you don't care for? Do you have competitors you despise? What, really, is your competitive advantage? How does your business change when communication, storage and processing are free resources?
 - 2: Stop insisting on completeness
 - 3. Make innovation easy through design thinking
 - 4: Recognize disruptions in research
 - 5: Change the decision process
 - 6: Start getting really international

Digital "anything"

Luis Alfons Ariño



Lluís Alfons Ariño: C-level executive with more than 22 years of experience within the IT sector, he has a deep knowledge of IT activities from different perspectives: as a business innovator, as a technology provider, as a service provider, as well as an end user. He is a IT director and CIO at Universitat Rovira i Virgili, Spain.

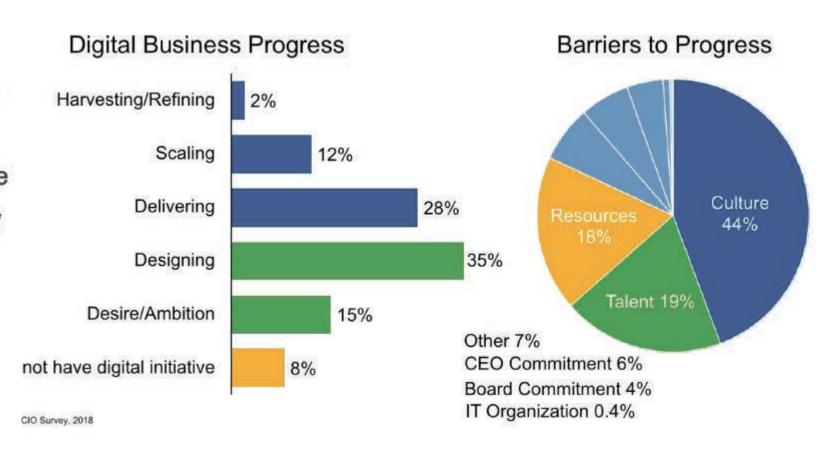
4th Industrial revolution – 2nd information revolution

Previous industrial revolutions liberated humankind from animal power, made mass production possible and brought digital capabilities to billions of people.

This Fourth Industrial Revolution is, however, fundamentally different. It is characterized by a range of new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies and industries, and even challenging ideas about what it means to be human.

Role of technology: Technology is the enabler of digital transformation, driven by four objectives: improved competitiveness, greater profitability, better customer experience, and greater agility throughout the company

- Digital transformation must drive real value to the customer and improve outcomes for the business, not technology for technology's sake.
- It is a process, and a cultural change: please remember to work on all the axis



The training process: We must train the whole organization

Employees

PAS: Digicomp

PDI: DigiCompEdu + Personal brading

Board

Rector & VRs: DigiCompOrg + Personal Branding

IT: ExperTICos



The intersection of hybrid cloud, large scale data facility and Al

Vincent Heuveline



Vincent Heuveline: Leader of the research group Data

Mining and Uncertainty Quantification (DMQ) at Heidelberg
Institute for Theoretical Studies. Besides his professorship, is
also Director of the Computing Center of Heidelberg
University. He also heads a research group at the university,
the "Engineering Mathematics and Computing Lab" (EMCL)
at the Interdisciplinary Center for Scientific Computing.

Digitalization as a learning process

- Administration people have no IT know how.
- Hyped over-enthusiasm vs reluctance among users
- IT has to learn about the administration requirements and motivators
- Interdisciplinarity: mutual understanding, common vocabulary...
- Translators: between process domain and IT
 - Interdisciplinary lectures on digitalization. Cheap measure with strong impact

The Digital Era is envolving into the Intelligence Era

James Michael Krouse



James Michael Krouse: Government and Healthcare Technology Expert Analyst / SAP Global Marketing Director.







Client Server & Internet 1990s - 2000s



Cloud, Mobile & Big Data 2000s - 2010s



Intelligent Technologies 2010s - 2020s

ENABLING TECHNOLOGIES

- Transistors & silicon revolution
- Large scale Mainframe Computing adoption
- Emergence of PC's
- Plant floor automation

- Widespread PC adoption
- **Broadband Internet**
- ERP and business process technologies
- Mobile & Smartphone ubiquity
- Cloud Computing
- Social Networks
- Big Data

- · Machine learning (ML) and artificial intelligence (AI)
- · Internet of things (IoT) and distributed computing
- Blockchain

CUSTOMER VALUE CREATION

Industrial Automation **Business Process** Automation

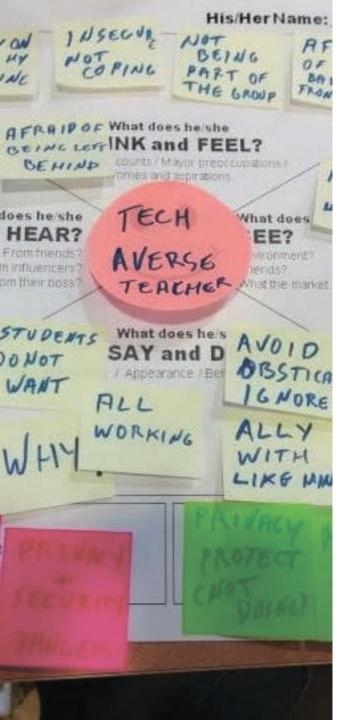
Digital Transformation Intelligent Enterprise

- Innovation in Technology continues to accelerate exponentially
- Variety and Types of Technology ML, AI, IOT, Blockchain...
- Technology pushes business change
- Technology market players continue to expand Enterprise, Startups, Niche



Design **Thinking** Workshop

2 groups, 2 challenges



Design Thinking results:



Group 1: How might we find the killer features for changing the tech averse teachers minds?

- Find the killer app to make tech avoiders get a smartphone to use the campus app.
- Grant priority access to scarce resources exclusively through the app as a killer feature.
- (eg. convenient lecture rooms)





Group 2: How do we create a culture which allow researcher to take risks, fail fast and allow them to share their feelings of insecurity and solitude?

- Make researchers interact with each other to help with research questions (foster exchange and cooperation).
- Create a searchable database on all research done (a CRIS) and ad a kind of social network/messenger that lets people approach colleagues with questions and lets them give scores on question/answer quality to build reputation of persons worth dealing with.

Ready for the next IT Leaders Retreat?

