



# Big Data & Analytics

## Lecture 5: Human side of BD&A, Course Takeaways and Q&A

# From Data to Decision

We still must consider the humans in the equation .. Clients

## Change of the Customer Relationship Management methods

- We are all consumers of the F&B Industry
- Role of Fidelity Cards, gamification, experience, contacting, mailing, information etc

## New Customer journey - digital storytelling and Changing customer touchpoints

- Taste & Try
- Do it yourself
- Experience
- Wine tasting

Advertising on values like sustainability, bio and addressing the “eat”- arian new religions and Cultural heritage

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## From Data to Decision

We still must consider the humans in the equation .. Employees

### Trade-offs

- a) Accuracy vs. interpretation and control
  - b) Speed vs accuracy
  - c) More data vs. privacy
  - d) Explanation vs. prediction (overfitting)
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- More horizontal integration between data scientists, domain experts
  - More involvement of line employees in algorithm interpretation
  - Big and small data use in Innovation vs. operation
  - Radical innovation vs. incremental improvement

# From Data to Decision

The future of job after the «digital tsunami»

## Collaboration

- Liaison roles
- Scientific method
- Combine small «experiential» data with big data (e.g. context-dependent knowledge)

DATA

KNOWLEDGE

INFORMATION

# Why Philosophy and ICT?

## Ontology and Epistemology in the Digital Age

As we navigate the complex landscape of **Information and Communication Technology (ICT)**, it becomes increasingly important to ground our understanding in foundational philosophical concepts. This chapter delves into **ontology** and **epistemology**, two pillars of classical philosophy, and explores their nuanced applications in the digital age when crossed with other two major pillars: **Mimesis** and **Poiesis**.

Philosophy		In the Digital world
ONTOLOGY: is a branch of metaphysics concerned with the nature and relations of being	➡	Understanding the nature of digital entities (e.g. Database)
EPISTEMOLOGY: is the theory of knowledge	➡	Interpreting the digital world (e.g. Machine learning)

# Why Philosophy and ICT?

## Mimesis and Poiesis in the Digital Age

In ICT, it guides us in understanding how we comprehend and interpret the digital world. For instance, machine learning algorithms, which are part of our epistemological tools, help us interpret and understand data, transforming it into actionable knowledge.

In the realm of digital technology, Mimesis and Poiesis emerge as pivotal concepts shaping our interaction with and understanding of the digital world.

Philosophy		In the Digital world
<b>MIMESIS:</b> the relationship between reality and how humans understand and replicate the world around them.	➡	... a lens through which we examine the implications of digital technologies as they replicate, augment, or alter our understanding of reality, identity, and human experience
<b>POIESIS:</b> is normally in relation to the concept of techne, which is the knowledge or skill of making	➡	... involves a broader reflection on how digital technologies are created and the impact of these creation processes on individuals and society

# Ontological Poietic Epistemology

The philosophy for the digital “Infosphere”

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Just as we live in the Biosphere, we also live in the Infosphere; it is not something we can escape from, but rather an integral part of our being.

*Luciano Floridi, The Fourth Revolution*

”

Information is no more (as it was seen normally as tool or resource) merely a passive element but an **ontological entity with significant ethical implications** due to the knowledge that is encapsulated.

# Ontological Poietic Epistemology

## The philosophy for the digital “Infosphere”

- Information is meaningful by its nature
- so we need an Epistemology that is based on the nature of the things
- things that are, sometimes, yet to be created,
- We need an **Ontological Poietic Epistemology**

In practical terms, this perspective profoundly impacts how IT professionals approach data security, AI ethics, and information management. For instance, when assessing the reliability of recommendation systems, we must consider not only their **technical efficiency** but also their **alignment with ethical standards and societal values**. Floridi's philosophy encourages us to consider the broader impact of our technological decisions, extending beyond mere functionality to encompass ethical and social responsibility.