

# MOT121A

# Leadership and Technology Management

2023-2024

Dr. Robert M. Verburg  
Module Manager

# (cluster) Technology, Innovation and Organization

## **MOT 121A**

### **Leadership and Technology Management**

## MOT 122A

### Business Process Management and Technology

## MOT 123A

### Inter- and Intra-Organization Decision Making

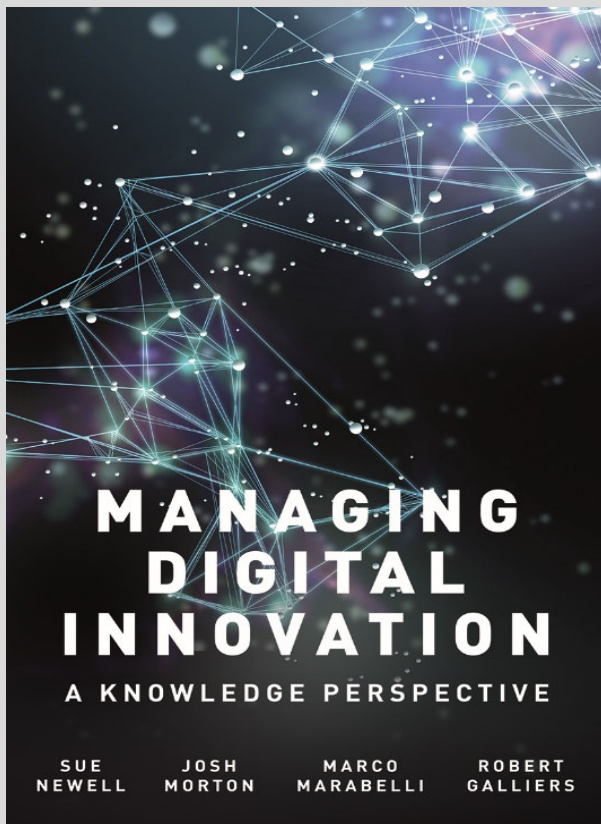
- 15 ECTS

# MOT121A Course Schedule

	Time	Place	Topic	Chapters	Professor
1	Wednesday September 6, 2023	TPM-A 10.45 – 12.30	The Changing Context of Work And the nature of innovation	1,2	RV
2	Wednesday September 13, 2023	TPM-A 10.45 – 12.30	Organizing and Strategizing for innovation	3,4	RV
	Introduction days	Introduction days	Introduction days	Introduction days	
3	Wednesday September 27, 2023	TPM-A 10.45 – 12.30	Projects, Teams and Open Innovation	5,6	RV
4	Wednesday October 4, 2023	TPM-A 10.45 – 12.30	Best Practices	articles	NP
5	Wednesday October 11, 2023	TPM-A 10.45 – 12.30	Leadership, Management and Power	7	RV
6	Wednesday October 18, 2023	TPM-A 10.45 – 12.30	Explicit and implicit Digital Connectivity Future Developments	8,9,10	NP
7	Wednesday October 25, 2023	TPM-A 10.45 – 12.30	Recap and exam info. Presentations group assignments		RV, AS
Final Exam	Tuesday November 7, 2023	Drebbelweg-Hall 1 13.30 – 16.30	Digital exam with essay questions	All materials	



# Literature

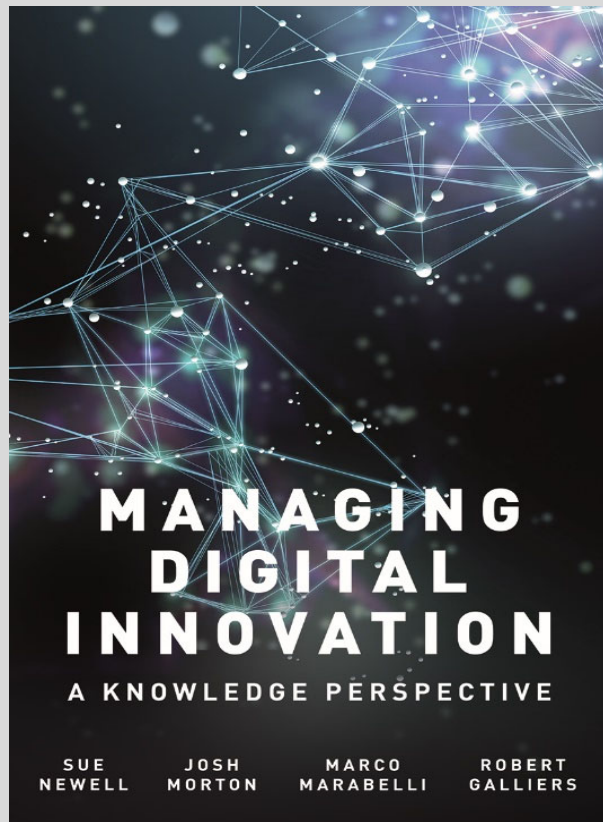


**Managing Digital Innovation: A Knowledge Perspective** by Sue Newell, Josh Morton, Marco Marabelli, Robert Galliers.

Publisher: Red Globe Press

Available as book or e-book

+ Some additional articles



Chapter 1: The Changing Context of Work: Implications for Knowledge and Innovation

Chapter 2: The Innovation Process

Chapter 3: Organising for Digital Innovation

Chapter 4: Strategising for Digital Innovation

Chapter 5: Projects and Teaming

Chapter 6: Project Liminality and Open Innovation

Chapter 7: The Role of Objects in Organising for Digital Innovation

Chapter 8: Explicit Digital Connectivity, Knowledge and Innovation

Chapter 9: Opportunities and Challenges for Innovation Related to Implicit Digital Connectivity

Chapter 10: The Future of Digital Innovation: The Role of Responsible and Frugal Innovation

# Examination on November 7, 2023

## Individual final examination

The final exam will be a **digital individual on-campus exam with open-ended question(s)** on the content of this course.

A completed group assignment is a prerequisite for attending the exam.

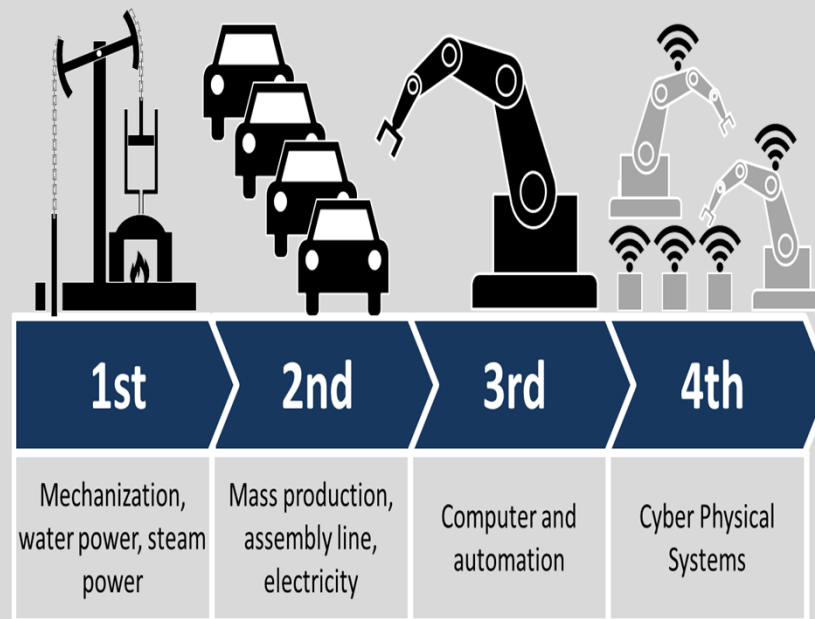
Hence, students who take the course seriously and structurally prepare the literature and assignments will be very likely to pass the exam.

A minimum grade of 5.75 in the exam is necessary for a passing this course.

## More information and a test exam will be provided later on Brightspace.

# The changing nature of work

- Organizations are becoming increasingly flexible
- Technology enables companies to organize their activities through complex projects with dispersed specialists often spanning boundaries of time and culture



## What is Knowledge Management?

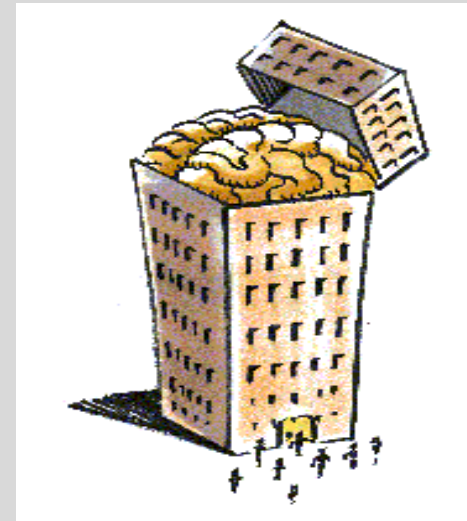
Knowledge Management can be defined as 'the effective learning processes associated with exploration, exploitation and sharing of knowledge (tacit and explicit) that use appropriate technology and cultural environments to enhance an organizations intellectual capital and performance.....

(Jashapara, 2004, p12.)



# Knowledge Processes

Establishing the knowledge that is needed  
Inventory of available knowledge  
Knowledge development (for example  
importing knowledge)  
Knowledge storage  
Knowledge sharing  
Applying knowledge  
Evaluating knowledge



# More fundamentally What is knowledge?

Tacit versus explicit knowledge?  
How do we gain knowledge?



## Discussion questions Ch.1

What do we mean by the knowledge economy and how is it different to the traditional industrial economy?

Why is digital innovation so important to organizations today?

Why is there a dark side to the more rapid product innovation cycle that is common today?

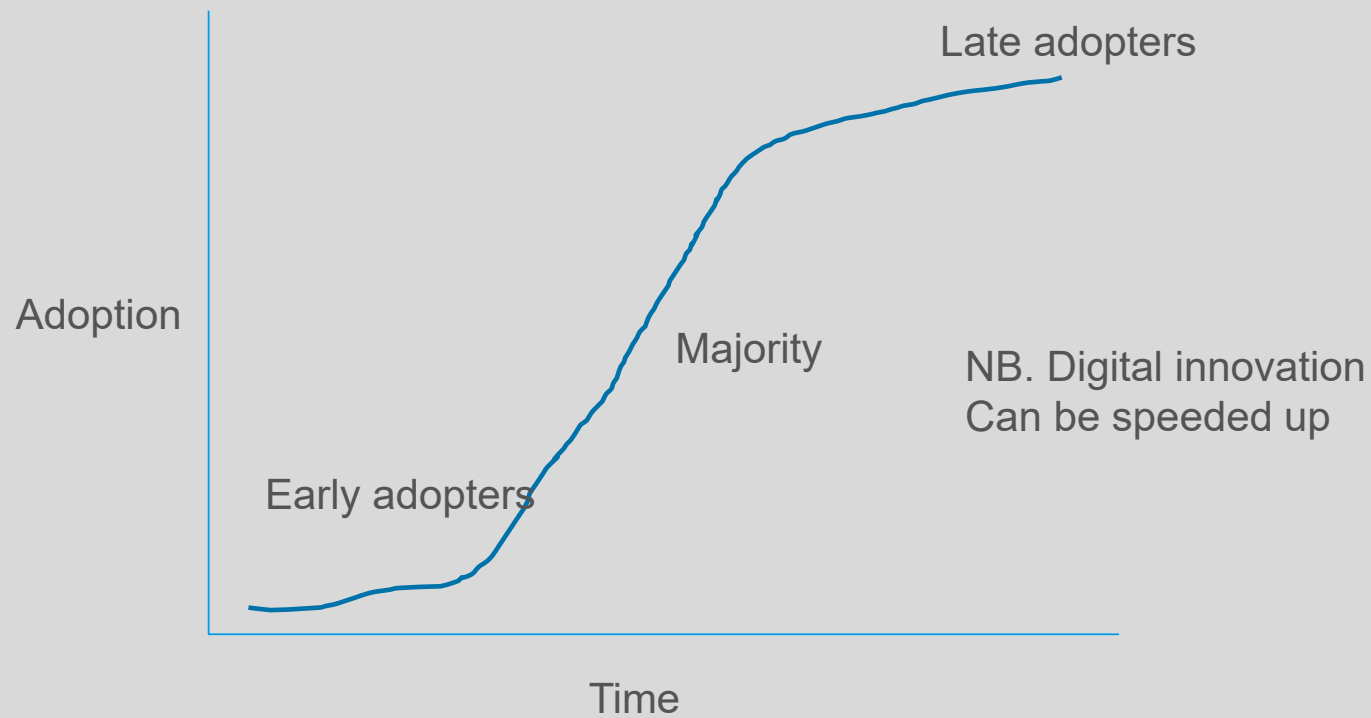
Why and how has the view of workers changed with the increasing importance of innovation?

What do you understand by knowledge and why do we need to appreciate that knowledge is both possessed and practiced?

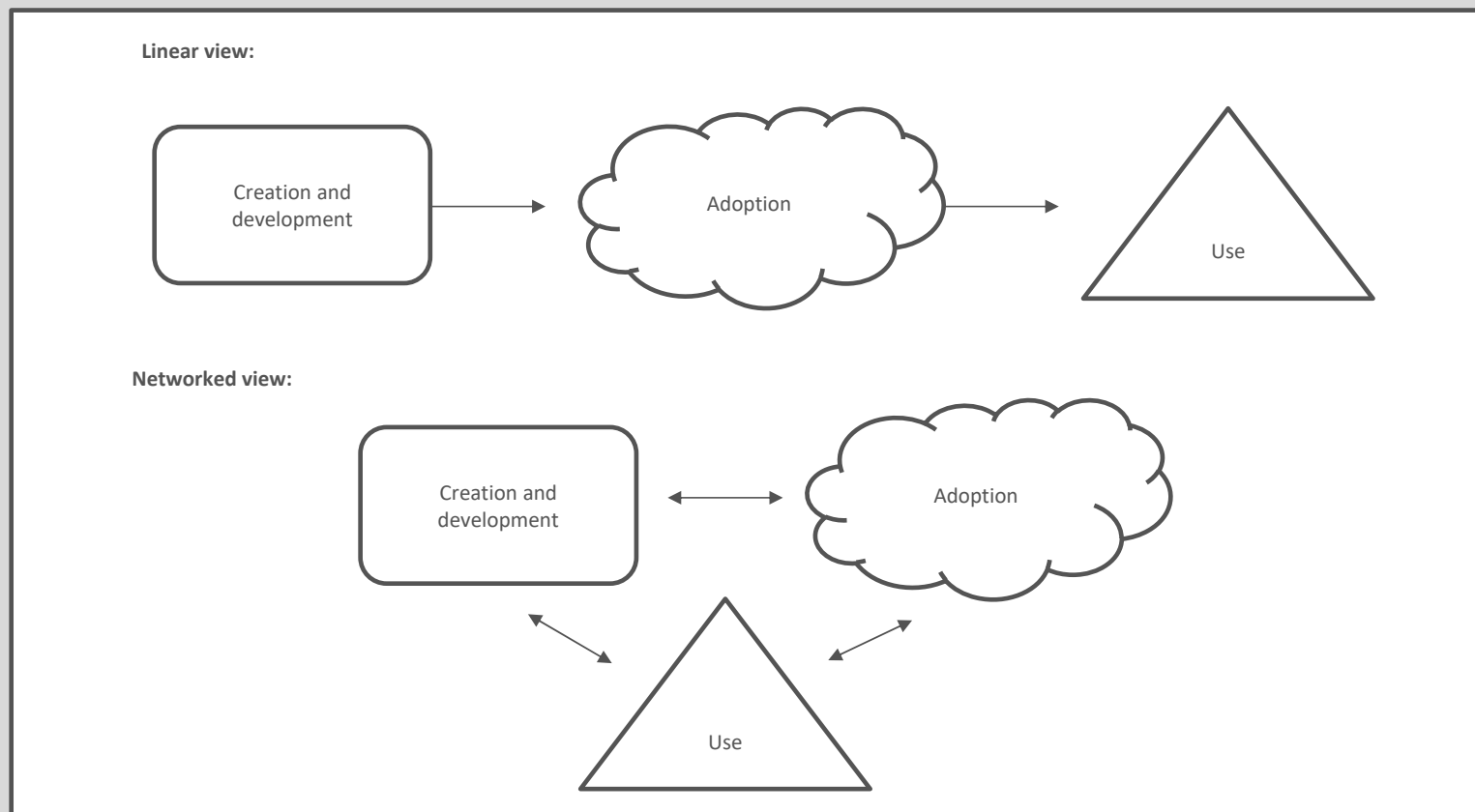
# Examples of different types of innovation

	Process innovation	Product innovation
<b>Radical innovation</b>	Business Process Reengineering	e.g. iPhone
<b>Incremental innovation</b>	Six Sigma	e.g. iPhone Generations
<b>Disruptive innovation</b>	Assembly line	e.g. 3D Printing

# S-Shaped diffusion curve (Rogers)



# Linear view vs. interactive or networked view of innovation



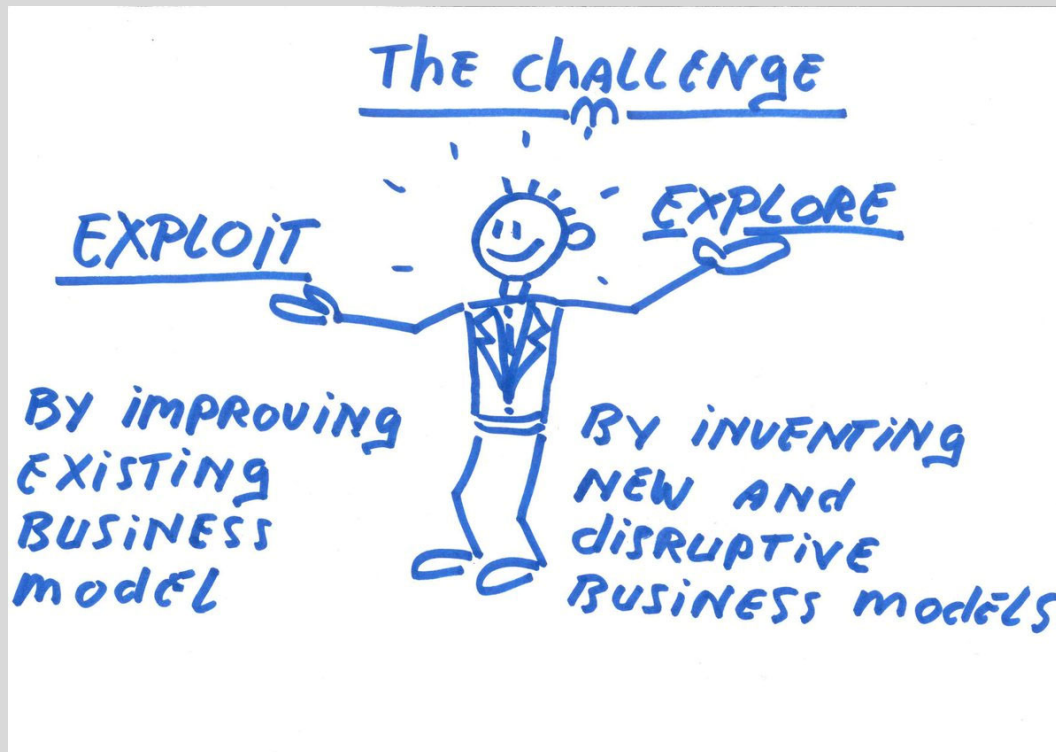
# How to manage innovation?

- ❖ Innovation is a knowledge process involving both the generation and implementation of ideas.
- ❖ Ideas are central to innovation.
- ❖ Innovation requires a wide variety of specific behaviors on the part of individuals (Amabile et al, 2004).

**One of the aims of this course is to gain a better understanding on how to manage employees for innovation.**

# Ambidexterity

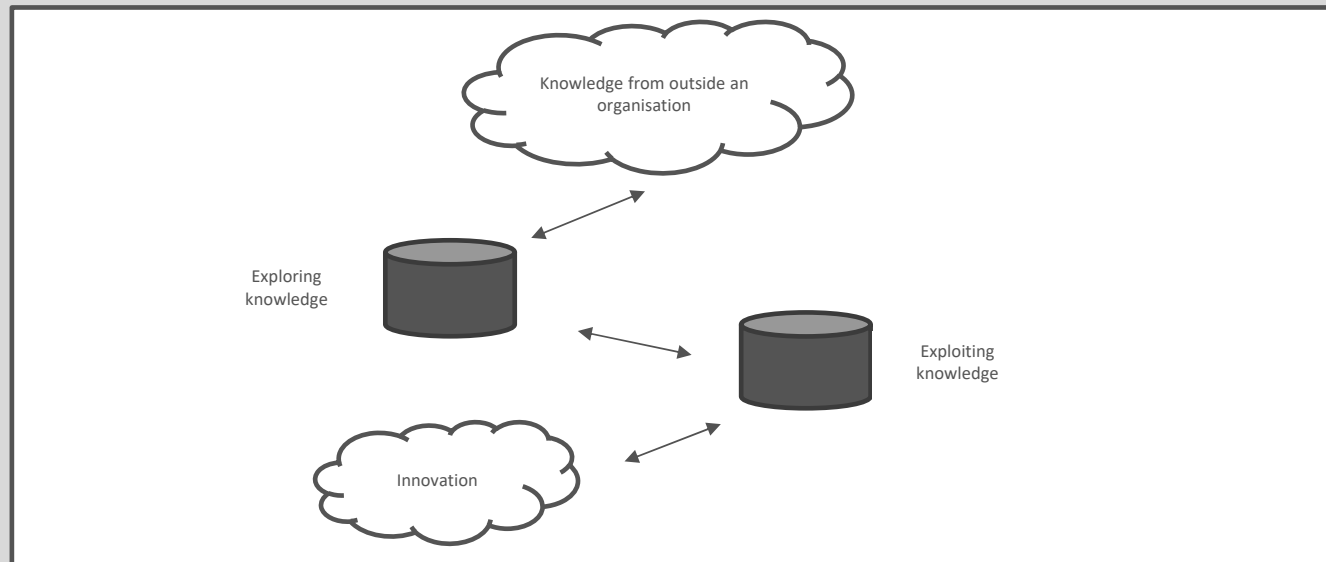
= firm's ability to combine both exploitation (delivery) and exploration (new idea generation)





# Interactive view of absorptive capacity

= firm's ability to transform knowledge into a successful operational process or product



Builds on process view but does not assume exploitation follows in linear sequence from exploration

## Discussion questions Ch.2

In what ways are different types of digital innovation (process/product/service) inter-related? Give examples to illustrate.

Why are some digital innovations disruptive? Give examples to illustrate.

Why might it be useful to recognise that the 'phases' of a digital innovation process (from the initial creation of an idea, through development and on to diffusion and use) are interactive rather than linear? Give examples to illustrate.

What is absorptive capacity and why is it relevant to digital innovation processes?

# Class Assignment



## Watch the video and answer the following questions

1. Describe the process of new product/service development at IDEO?
2. What type of people would fit best with this particular kind of organization?
3. Describe the governance structure (i.e. leadership) of IDEO?
4. What are the biggest threats for IDEO?
5. How do people learn within the context of IDEO?

# 1. Describe the process of new product/service development at IDEO?

One conversation at the time

Stay focused on topic

Encourage wild ideas

Build on the ideas of others

Fail often to succeed sooner

# Brainstorming Rules for Creativity (Osborn, 1953)

1. Refrain from criticism.
2. Freewheeling is welcome.
3. Build on the ideas of others.
4. Quantity is wanted.

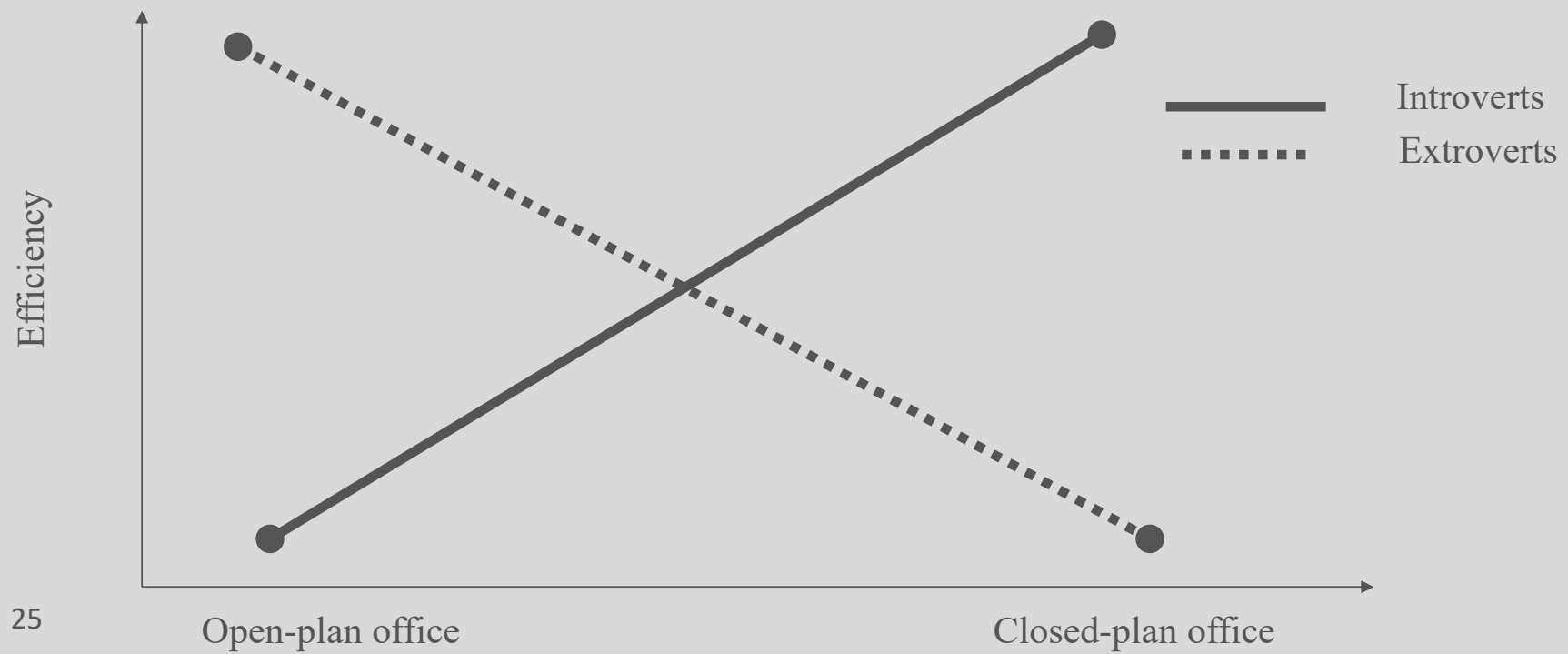
2. What personality type would fit best with this particular kind of organization?

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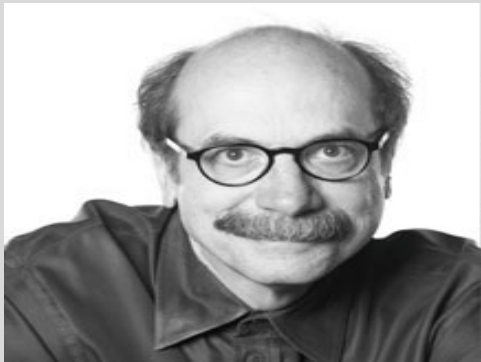
1. Extroversion	Sociable, gregarious, assertive, talkative, expressive
2. Adjustment	Emotionally stable, nondepressed, secure, content
3. Agreeableness	Courteous, trusting, good-natured, tolerant, cooperative, forgiving
4. Conscientiousness	Dependable, organized, persevering, thorough, achievement-oriented
5. Inquisitiveness	Curious, imaginative, artistically sensitive, broad-minded, playful



# Person-Job Fit



### 3. Describe the governance structure (i.e. leadership) of IDEO?



As founder of IDEO, David Kelley built the company that created many icons of the digital generation—the first mouse for Apple, etc.

But what matters even more to him is unlocking the creative potential of people and organizations so they can innovate routinely.

## 4. What are the biggest threats for IDEO?

Finding the right people

Training people to become effective

Competition

Design Fatigue

Etc.

## 5. How do people learn within the context of IDEO?

# Four Principles of Learning

- Goal setting
- Behavior modeling
- Practice
- Feedback

## For next week

Prepare for chapters 3,4

Check out Brightspace for the group assignment

More information on the mandatory group assignment will follow (Sept. 18 deadline for group formation)

# Thank you !

The MOT121A Course Team

Robert Verburg, lecturer

Nikos Pachos, lecturer,

Sander Smit, moderator group assignment