



Aalto Ventures Program



# TU-E4300 - Introduction to Digital Business and Venturing

1st lecture Sep 9th, 2023  
O-P Mutanen, Hani Tarabichi



EIT Digital  
Master School

# Teacher: Olli-Pekka Mutanen



## CURRENT: Professional career and societal activity

- Research Manager in Digital Operations research group, School of Science, Aalto University
- Aalto Ventures Program, co-founder and lecturer
- EIT Master's Programme in ICT Innovation, I&E Coordinator and responsible teacher
- National Growth Forum (Finland), co-founder & member of the steering group
- Industrial activities and lecturing related to technology based growth, ecosystems and business

## BACKGROUND: Co-founder and CEO of IT, Media and Software firms (1991-2004)

- *MULTILIZER, Inc. 1998-2004, Co-founder, CEO and Member of the board*
  - The market leader in software globalization technology platform solutions for internationally operating enterprises
  - Product awarded as The Best Globalization Technology of the Year in 2001, 2002 and 2003 in the United States
- *HYPERHOUSE Group: 1995-2000, Co-founder, Director of projects*
  - HYPERHOUSE was among the top-three multimedia and internet service firms in Finland producing corporate wide solutions and internet services to the leading enterprises and organizations in Finland
- *INNOVIEW Data Technologies 1991-2000, co-founder, CEO and member of the board*
  - Development of software based technologies and solutions, e.g. image compression and archiving technology solutions, multimedia development tools, POS systems, online based real estate solutions

**CONTACT:** [olli-pekka.mutanen@aalto.fi](mailto:olli-pekka.mutanen@aalto.fi), [fi.linkedin.com/in/opmutanen](https://fi.linkedin.com/in/opmutanen)

# Today's agenda Sep 8th

- 1. Theory part:** Opportunity generation and idea development, Hani Tarabichi;
- 2. Course Concept:** Why this course, introduction, contents and practicalities;
- 3. Organizing:** Group formation, thematic online modules, etc.

**Lecturer: Mr. Hani Tarabichi**

**But who is  
HANI...?**

# Opportunities in Entrepreneurship - Hani Tarabichi, Aalto University; THEORY PART TODAY

# 1. MOTIVATION

# Digitalization is shaping our World...

It is **Not** only about **More Digital**. But is about **Change** throughout the organizations and business environment, and totally **new things** and **opportunities** such as:

- **Transforming** gradually all **industries**... Think about photographing, retail, healthcare, education... you name it!
- Leveraging digitalization to **address key challenges and opportunities** of our times: Sustainability, poverty, epidemics...
- **New, highly scalable business models**, with quick and global impact, such as platform-based ones...
- **Impact through whole society**: new usages, economical models, jobs, ways to interact,...
- **New organizations, new ways to innovate**, to **design and market products**, within entrepreneurial, agile, multi-disciplinary teams...



TOP 5 PUBLICLY TRADED COMPANIES (BY MARKET CAP)

 Tech  Other

2013  
Q1



\$416B



\$404B



\$257B



\$255B



\$246B

2018  
Q1



\$851B



\$717B



\$703B



\$701B

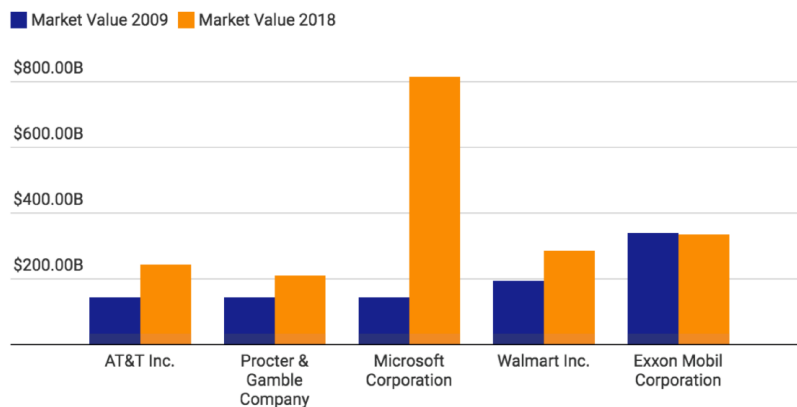


\$508B



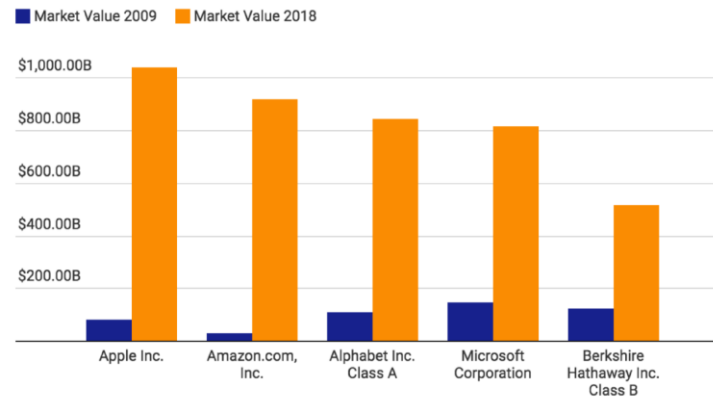
# The shift towards 'platform economy'...

## 2009



Market Value 2009 as of 02/27/2009 and Market Value 2018 as of 08/21/2018

## 2018



Market Value 2009 as of 02/27/2009 and Market Value 2018 as of 08/21/2018

# Top 10 biggest companies in the world by market cap in 2023

Company	Sector	Market Cap (in USD)
#1 Apple	Technology	\$2.744 trillion
#2 Microsoft	Technology	\$\$2.353 trillion
#3 Saudi Aramco	Oil & Gas	\$2.224 trillion
#4 Alphabet (Google)	Technology	\$1.624 trillion
#5 Amazon	E-commerce	\$1.336 trillion
#6 Nvidia	Technology	\$1.069 trillion
#7 Berkshire Hathaway	Diversified Investments	\$770.43 billion
#8 Meta Platforms	Social Media	\$725.89 billion
#9 Tesla	Automotive (Software)	\$682.99 billion
#10 Eli Lilly	Pharmaceuticals	\$518.71 billion

# 2. BACKGROUND



Aalto University  
School of Science



# Welcome to Aalto!

”The University invests in championing entrepreneurship that is based on **top-level academic knowledge and expertise...** by reforming the education and by collaborating with financiers to develop flexible systems for **supporting the creation and development of growth companies.**” (source: Aalto University’s Strategy)



# Community of bold thinkers

At Aalto University, **science** and **art** meet **technology** and **business**. We are building an **innovative society** through high-quality research, teaching and artistic activity.

# Merger of three leading Finnish universities

1849

Helsinki University of Technology

1871

University of Art and Design Helsinki

1911

Helsinki School of Economics

Aalto  
University

**2010**

**A!** Aalto-yliopisto  
Aalto-universitetet  
Aalto University

**A!** Aalto-yliopisto  
Aalto-universitetet  
Aalto University

# Towards a better World

A **societally embedded and innovative** research university for a better world.

A national mission to **strengthen Finland's innovative capacity** through **first-class research, art and education.**



# Purpose: Shaping a sustainable future

Aalto University is founded **on high-quality research, education, impact** as well as shared values of responsibility, courage and collaboration.

**We solve global challenges** by bringing talent together across science, art, technology, and business.

**A?** Aalto-yliopisto  
Aalto-universitetet  
Aalto University

**A?** Aalto-yliopisto  
Aalto-universitetet  
Aalto University



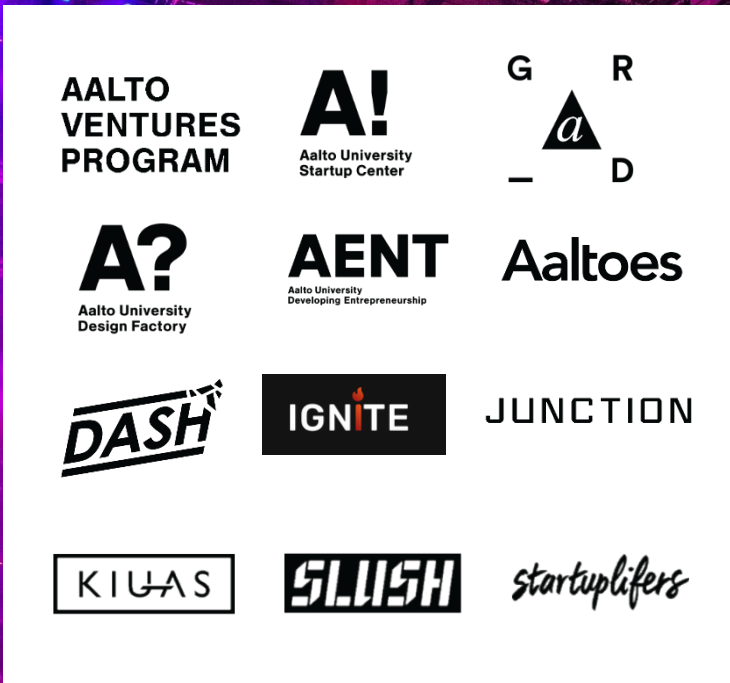


# Game changers of tomorrow

- Global challenges require professionals with the capabilities to build a sustainable society and increase wellbeing through disruptive change.
- Many programmes and courses on sustainable development, both field-specific and multidisciplinary.



# Vibrant entrepreneurial community



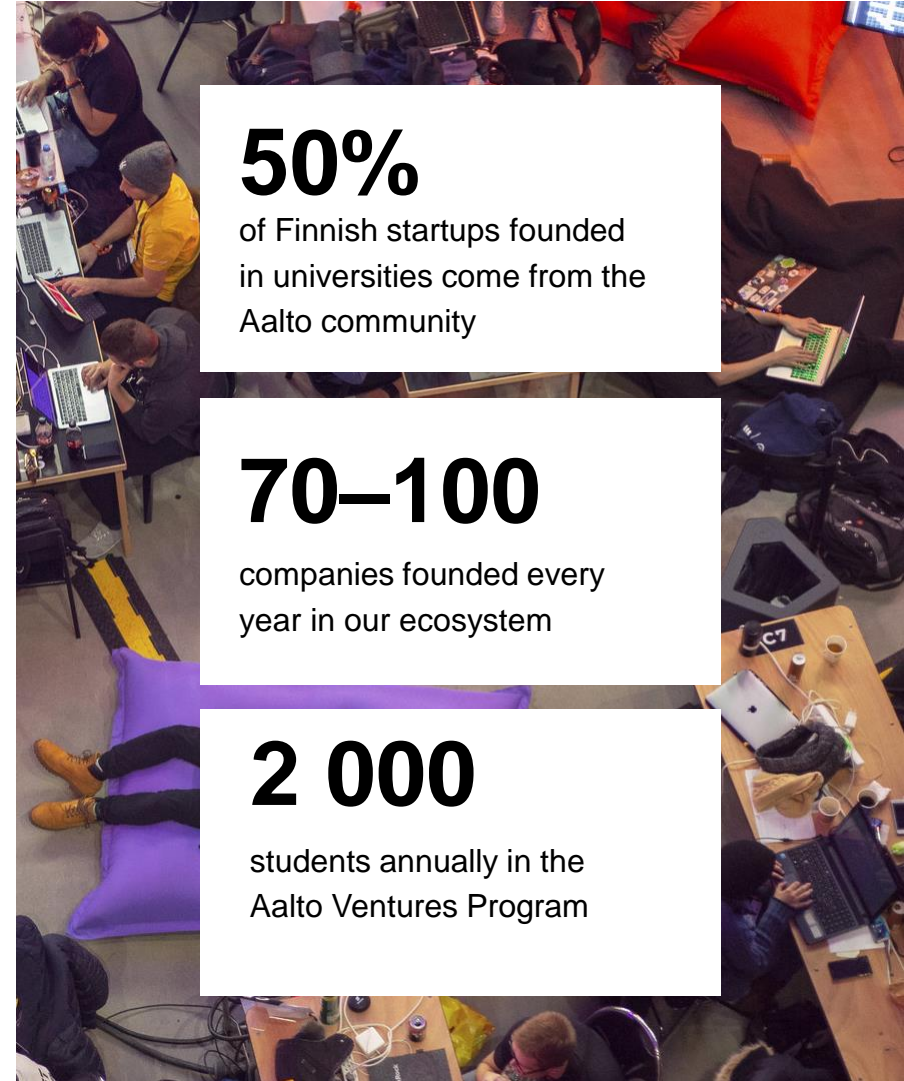
- **Low-hierarchy culture with empowered students:** driving force behind the entrepreneurial ecosystem.
- **Slush**, one of the world's largest startup events, and Europe's leading hackathon Junction were born in Aalto's student community.

**A!** Aalto-yliopisto  
Aalto-universitetet  
Aalto University

**A?** Aalto-yliopisto  
Aalto-universitetet  
Aalto University

# Advancing entrepreneurship

- We foster an entrepreneurial mindset across the university.
- We want to inspire our students to think and learn like an entrepreneur by integrating entrepreneurial courses into all fields of study.
- Support student-driven activities by providing spaces and funding.



**50%**

of Finnish startups founded in universities come from the Aalto community

**70–100**

companies founded every year in our ecosystem

**2 000**

students annually in the Aalto Ventures Program

# From ideas to impact

- Good ideas turn into great business in Aalto's multiple incubators and accelerators.
- Aalto University Innovation Services and Aalto Startup Center form a path to entrepreneurship for Aalto-based research innovations.
- Many of the most promising, innovative research-based startups in Finland originate from the Aalto ecosystem.\*

\*in 2020, 2 out of 5 most funded Finnish startups were Aalto-based

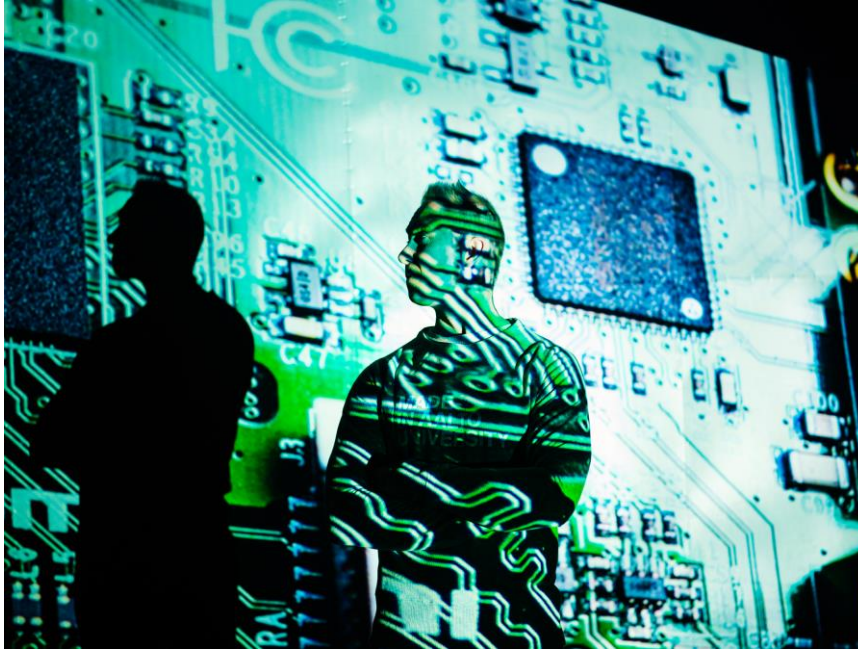


# AALTO VENTURES PROGRAM





To provide Aalto students with  
Inspiration, Capability and Network  
necessary to build new scalable businesses



So, we're talking here about...

**BUILDING SCALABLE BUSINESSES!**

# Supercell is Accel's fastest growing company ever. (And it has a ball pit)



NEWS



By Hamish McKenzie  
November 27, 2012



Ilkka Paananen is slumped in a high-backed office chair, wearing a blazer, blue jeans, and a black T-shirt that bears the name of his two-year-old gaming company, one of the most buzzed-about in the world right now, spelled out over three lines:



MAR 3, 2016 @ 02:05 PM 2,387 VIEWS

# Supercell's 'Clash Royale' Is Dominating The App Store



**Dave Thier**, CONTRIBUTOR

I write about video games and technology. [FULL BIO](#) ▾

Opinions expressed by Forbes Contributors are their own.



Image Credit: Supercell

When Supercell releases a new game, people take notice. The *Clash of Clans* maker has firmly established itself as one of the dominant forces in the app store, and it doesn't seem like its new game, *Clash Royale*, is going to do anything to change that. The game shot to the #1 spot on top free downloads shortly after its United States release, and it's already up to #4 on top grossing. *Clash of Clans* itself currently sits at no. 2, below Spotify.

## Games

# Clash of Clans maker Supercell becomes Europe's first 'decacorn'

The first \$10bn technology company from Europe is Finland's Supercell, following a buyout from Tencent

Alex Hern

@alexhern

Thursday 23 June 2016 14.28 BST



This article is 1 month old

Shares

1,525

Save for later



The deal will see Tencent and its partners secure an 84.3% stake in Supercell, best known for its Clash of Clans mobile game. Photograph: Thomas White/Reuters

Finland's Supercell has become Europe's first ever "decacorn" - that's a technology company worth \$10bn - after a buyout from Chinese internet leviathan Tencent.

The deal will see Tencent and its partners secure an 84.3% stake in Supercell, best known for its Clash of Clans mobile game, paying \$8.6bn (£5.78bn) for the pleasure. That values the overall company at \$10.2bn, the first European technology startup to break that barrier.

Advertisement

"Se kävi sit Kamuxilla." >>

**KAMUX**  
EDULLISEMPÄÄ AUTOKAUPPAA

# Comparison: SuperCell (startup) vs. Nokia Corp.

GAMES

With just 3 games, Supercell made \$924M in profits on \$2.3B in revenue in 2015

DEAN TAKAHASHI @DEANTAK MARCH 9, 2016 2:30 AM



There's something magical in the water, or the snow, in Finland. Helsinki-based Above: Supercell's offices

- Revenue: €23.6 billion
  - Nokia Networks: €21.8 billion
  - Nokia Technologies: €1.05 billion
- Operating profit: (-)€1.1 billion (loss)
  - Networks: (+)€1.9 billion
  - Technologies: (+)€580 million
  - Group common and Other: (-)€342 million
  - Alcatel acquisition and integration: (-)€3.2 billion
- Profit: (-)€912 million (loss)
  - Margin: -4.7%
- Dividend: €0.17 per share (€972 million)



## **Innovation and Entrepreneurship (I&E) Education at EIT Digital Master and Doctoral Schools**

*<http://www.eitdigital.eu/>*

# Entrepreneurial Education at EIT Digital



Tomorrow's digital innovators & entrepreneurs



Tomorrow's leaders in digital technologies



Lifelong at the frontier of digital innovation

## BLENDED EDUCATION

Partner Universities

Co-Location Centres

On-Line Platforms

# Entrepreneurial Education

## Blended Learning

**600+ elements / 45+ hours** of online content available

**High quality** online contents  
(videos, entrepreneurial cases, quizzes, assignments...)

**Pre-packaged sessions** for use in class, as pre-assignment or post-assignment



Sales in Growth Companies. Aalto University

➤ **Advancing Entrepreneurial education in the EIT Digital network**

Contents, Practicalities, Getting Started...

# 3. COURSE PRACTICALITIES

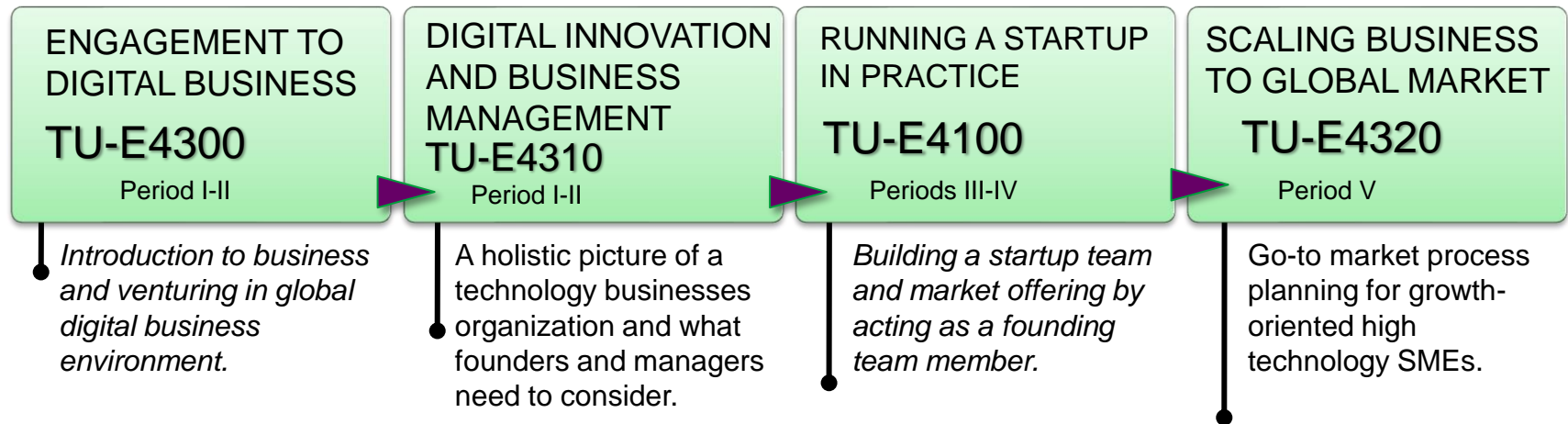
# Innovation & Entrepreneurship Minor (1<sup>st</sup> year)

**TU-E4300 - Introduction to Digital Business and Venturing (3 ECTS), Autumn I**

**TU-E4310 – Digital Business Management (4 ECTS), Autumn II**

**TU-E4100 - Startup Experience (9 ECTS), Spring III-IV**

**TU-E4320 - Global Business in the Digital Age (4 ECTS), V**





# TU-E4300 Introduction to Digital Business and Venturing (3 ECTS)

## After the course you...

### Learning goals:

- Know the basics of **digital business and entrepreneurship**;
- Are aware of phenomena and **key drivers related to digitalization and transformation** of business organizations, industries and whole societies;
- Understand the role and **importance of new and growing businesses** to national economies;
- Have general understanding of **the process involved in developing an idea and defining a value creation logic** for a new technology-based company;
- Are familiar with exploring **customers and markets**, analyzing technology and service based **business models** and **factors having effect on their performance**;
- Are familiar with **value creation and capture mechanisms, intellectual properties** and **related strategies**, and are **able to apply** them to real world business cases;
- Understand the role, content and recognize different **types of a business-level strategies**;
- Are aware of the **ethical and sustainable viewpoints in business** having readiness for critical thinking and assessment;

# TU-E4300 Introduction to Digital Business and Venturing (3 ECTS)

Contents:	<p>Combination of <i>theory and expert lectures, live lectures, readings</i> and <i>online contents</i>, and <i>real world business case assignments</i> from the following themes:</p> <ul style="list-style-type: none"><li>• Digital and various high-tech markets and industries;</li><li>• Creative destruction, disruption, digitalization, convergence, automation, consumerization, commoditization, servitization, digital transformation; ecosystems, and platforms;</li><li>• Mobility, cloud (computing), social (media), information (analytics), big data, mydata, machine learning, artificial intelligence, data mining, blockchain;</li><li>• Markets and industries, customer segmentation, business organization, entrepreneur, entrepreneurship process, venturing, leadership, management, business processes, operations, value creation logic and strategy;</li><li>• Opportunity identification, idea development, value creation logic, business model analysis and design, venturing process;</li><li>• Ethical and sustainability viewpoints in business, case digital environment;</li></ul>
Teaching Methods	<p><b>Lectures</b> (theory base in online modules, live lectures), <b>experiential learning</b> in small entrepreneurial teams, <b>group &amp; personal feedback</b>.</p>

# Course communication

- **Announcements**
  - One-way notification of any and all changes, events etc on the course
- **Discussion forum (in MyCourses main page)**
  - Ask your questions here that are not personal/private in nature
  - So your fellow students get the answer too or can answer you
- **Email to staff**
  - Matters that are personal/private in nature
  - Send to **olli-pekka.mutanen @ aalto.fi**
  - Start header with **[TU-E4300]**
  - Include your **full name and student number**



# Basic course information

- Period I, 3 ECTS
- Language: English
- Learning content:
  - Sessions on Thursdays 10:15 - 12:00 in Lecture hall TU1
  - Participation firmly supports completing the course (assignments);
  - Online material (videos, content slides, readings);
- Assignments: **Individual assignment + Group assignment**
- Assessment: Individual 50% + group assignment 50%

# Individual Assignment

**50% of your course grade** depends on the individual assignment (based on staff evaluation);

## Individual assignment:

- Evaluates how well you have learned the theoretical content presented at lectures and in online learning materials;

## DL Sun 22.10. 23:00

- But no need to leave it that late...
- Much of the theories used will be covered by mid-course;

# Group Assignment

## **50% of your course grade depends on this**

- Final report (DL 22.10. @ 23:00)
- Evaluated by staff

## **Phase 1 of the Group Assignment, DL 19.9. @ 23:00:**

- Overall 'helicopter view' feedback given by staff in Sep 21st lecture (Note: Not any group specific but general level feedback).
- Purpose: NOT evaluated part of the course, it's just to give all teams some early feedback to support the finalization of the course work.

# Group Assignment: requirements

## See info in MyCourses for Final Report...

- 12-15 pages
  - Excluding cover page, ToC, references, appendices..

## Expected relative lengths...

- Phase 1: around 1/4 to 1/3 of Final Report
- Phase 2 (the rest): around 2/3 to 3/4 of Final Report

# No Plagiarism Accepted!

**NOTE: We will provide more info on this for those of you that may be unfamiliar with how this is considered and handled at Aalto University.**

**Don't even think about this possibility!**



# Learning Contents (materials)

## 1. Lectures

- Slides and other material used in lectures published in MyCourses (under the Schedule section);

## 2. Online modules at EIT Online

- Find information on how to access them in MyCourses;
- Materials are produced by EIT Digital partner universities (including Aalto U) and managed by EIT Digital;

## 3. Any information you can find or get access to

- Remember to give the related source (reference) when applying information;

# I&E Basics 1 Aalto 2023

## Online lectures (contents) for this course:

1. Introduction to Technology Entrepreneurship
2. Opportunity Generation
3. Human Resources
4. Business Model Development
5. Digitalization: disruption, destruction and transformation
6. Intellectual Property Strategies
7. Dealing with Risk and Uncertainty
8. Digital Ethics and Sustainability



**Please Note: 1.** Check the **recommended sequence** of use for these in MyCourses (under the Schedule section)

**2.** The video-format lecture modules include **Quizzes** that you can use for testing your understanding. Enjoy your learning!

# I&E Basics 1 Aalto 2023 (Cont'd)

**Additional (Optional!) Online lectures for this course:**

1. Digital Transformation
2. Financial Planning
3. Growth and Exit
4. Commercialization Strategies
5. Design Thinking

**Please Note:** The online parts above are optional and available to deepen your overall understanding on the course domain. These contents are not required in your course assignments although presenting good-to-know type of knowledge.



# Examples from Online Modules

## Business Modelling (Tu/e) approx. 60 min duration

Covering themes on: Business model definition, Designing a viable business model, Business model's functions and Business model Innovation.



## Business ethics and sustainability (Aalto) approx. 2h duration

Covering topics on Corporate Social Responsibility, Integrating Sustainability into business Innovation and Sustainability



## Intellectual property strategies (Aalto) 11 lessons – approx. 2h duration

Lectures on Introduction to IP, Legal agreements, Entrepreneur IP toolbox



# Registration to the Online Modules

1. Go to: <https://ieonline.eitdigital.eu/login/signup.php?>
  2. Create a new account. **IMPORTANT: use your aalto.fi email for both username and email address fields.**
  3. **Staff will need to join the new accounts to the course (I&E Basics 1 Aalto 2023) by hand after this:**
    - We will do the additions in batches during the first two weeks of the course.
    - Do not expect 'service' during the weekend so create the new account immediately when you read this.
  4. *If you have trouble accessing the site or material later after these steps (and sufficient time between your account creation and us adding it to the course please email us teachers first [name.lastname@aalto.fi](mailto:name.lastname@aalto.fi)*
    1. *Include your name, email used for the account/login attempts in the email.*
    2. *Start the **email subject with 'TU-E3400:'***
- **Please Note:** However, IF you have already created the account using your personal or some other email address, please **inform us about the email address you used to [anna.kurmaeva@aalto.fi](mailto:anna.kurmaeva@aalto.fi) (Cc: [olli-pekka.mutanen@aalto.fi](mailto:olli-pekka.mutanen@aalto.fi))**

# Group Formation (Student Teams)

**See further instructions** in MyCourses (under the Group Assignment section);

## **Up to 12 groups of 4 persons**

- Possibly expanded to 5 once we know who will continue on the course;

## **Cases: 1. MeruHealth, 2. Smartly, 3. Supercell, 4. Wolt**

- Desktop research, no case contacts (but you're free to find out...);
- 3 groups each (to facilitate learning from other cases);
- **First come, first served!** (to incentivise quick action)

# How to form groups?

In short for now, see more details to come in MyCourses...

**When you have a group of 4 (or close to) persons:**

- Email → [olli-pekka.mutanen@aalto.fi](mailto:olli-pekka.mutanen@aalto.fi)
- Include all student names (as they are in MyCourses)
- State your preferences for the cases (1-4)
  - First come, first served so this is just to help things run smoothly if some cases are 'full';

**We will open the Course Project - group choice -activity (see below) on Friday 8.9. at 12:00 am.**

- You can then individually and freely choose a group from those ones available:
- When you have a 'full group of 4' email of your preferred cases.

**Everyone should be in a group by Monday 11.9. at 12:00 am.**

- If you are not, you'll be randomly assigned to a group. Groups without a case firm will be assigned one also.
  - NOTE: To avoid 'orphan groups', the number of students in open groups is initially capped at 4. This will be either expanded to 5 later or the remaining students will be assigned to groups by course staff.
- 



A person is shown from the chest up, suspended on a zipline. They are wearing a blue and white striped shirt, a white helmet, and sunglasses. Their feet, wearing grey sneakers with a white sole, are raised high in the air. Their hands are also raised, palms facing forward. The background consists of a dense forest of tall trees and a complex network of wooden platforms, ropes, and cables that form the zipline course. The overall scene is bright and sunny.

**Welcome to the  
course – enjoy the  
ride!**



# THANK YOU!

MEET YOU AT THE NEXT SESSION SEP 14<sup>TH</sup> AT 10:15!