



tu-e4040 opportunity prototyping

fall 2020 (tuesdays 14.00 – 16.00)

3 ects

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covid considerations

Life is full of risks and uncertainties and especially so given present circumstances. Our primary concern at Aalto and my primary concern as your mentor is to ensure, as best we can, an impactful and safe learning experience for you. Customer facing industries, universities among them, are rapidly rethinking strategies on how to compete. Social distancing measures impact a high touch, improvisational experience like higher education especially hard. Transforming this experience to digital is a long term undertaking and while the technology enablers are there, the ongoing challenge is to figure out what to migrate online, creating the touch and feel of the classroom "on screen", while retaining the ability to impart knowledge and develop talent face-to-face as conditions allow.

This course is a **prototype** – an experiment with an "e" to validate whether if we build a digital version of Opportunity Prototyping, student learning will be positively impacted. Put another way, you will be putting your creativity to work within a course that itself is a prototype in the making.

Operating conditions might change very quickly, but at this moment the evolving redesign of this course will be guided by the following principles:

1. Course encounters will be conducted online through **Zoom**. Traditionally a time slot has been reserved in your schedule – in this case Tuesdays 14.00 – 16.00 – online encounters will be scheduled at this time through Zoom.
2. You will note that I had scheduled this class in Aalto Design Factory. This was a deliberate decision as I consider this space to be among the most creative and stimulating on campus. If conditions allow you to visit and/or for us to safely meet as a group there, I encourage you to do so in a COVID compliant way.
3. A significant part of the course is group related involving me deeply as a team mentor, Students in past years said this was the MOST impactful aspect of the experience. I want to keep this element intact through using **Teams**. (Although I still don't know how to digitally recreate the experience of having cappuccino in my office --- I have my own equipment!)
4. We are all “kids again” – we are experiencing the world with fresh eyes and creative perspectives. Uncertainty creates nervous energy but, to those who embrace it with creative and open minds, it also creates conditions where transformational opportunities emerge and can be brought to life, albeit in challenging circumstances.

overview

At its core, the entrepreneurial process deals with the dynamic challenges faced by individuals who wish to pursue an opportunity but do not have the necessary resources at hand. Many individuals mistakenly equate entrepreneurship with starting an independent business of their own. This may very well be the most appropriate way to pursue an opportunity but entrepreneurial process thinking is context blind; it can happen in new ventures, existing businesses, family businesses, not-for-profit initiatives, in fact anywhere where opportunity pursuit is bounded by resource constraints.

The design of this course is deliberately provocative and challenges much of the conventional wisdom as to the theory and practice of entrepreneurship:

- 1) In essence, the entrepreneurial process is an exercise in design thinking; how to create a compelling solution to a customer's problem. Perhaps more than any other discipline, design looks at problems from a deeply customer empathetic perspective.
- 2) The linear logic of “have idea”, “write plan”, “raise money” is entirely misplaced. Ideation is defined as a process of forming ideas or images --- note the visual imagery to design disciplines. In my experience, too little effort is placed on creatively exploring how problems can be solved from the outset. Piquing the imagination of others is the hallmark of individuals that can and do push innovation solutions forward
- 3) Pursuing opportunities is a tough endeavor; resource providers are skeptical as are target customers. Anyone can do it but the alignment of personalities, opportunities and resources rarely fall into place as neatly and quickly as aspiring entrepreneurs hope. The fear of failure is often a big inhibitor for individuals to step out of their comfort zone. One of the greatest innovators of all time, Thomas Edison, considered failure as learning insights. In keeping with this spirit, the philosophy of the course is a “failure tolerant creativity zone”.

course objectives

We will introduce you to an approach called effectuation, a set of decision-making principles that **expert entrepreneurs** use in situations of high uncertainty:

- 1) Action is initiated based on means available and not pre-set goals
- 2) Limits of investment both in terms of time and money are set up front
- 3) Opportunities are explored and developed in co-creation with outside parties
- 4) Surprise opens up new possibilities if you are open to reshape the opportunity
- 5) The future is shaped by the actions you take

Using available means as a starting point, expert entrepreneurs create an artifact (idea), set limits on how much time/money to spend evaluating the opportunity potential, engage the outside world with an open mind to shape the opportunity with an aim to secure pre-commitments from some to take an opportunity forward. All the while, they are open to insights from surprises they encounter along the way demonstrating a knack for "turning lemons into lemonade".

Expert entrepreneurs are the epitome of intentional learners continually honing their skills and abilities by treating every experience, conversation, meeting and moment as a **learning opportunity**. The fuel that drives their intentional learning is adopting a growth mindset that considers intelligence and capability as traits to be developed coupled with a determination to feed their innate curiosity.

In an effort to stimulate the intentional learner in you, the course objectives are for students to:

- 1) Exercise their inherent "curiosity muscle" on a challenge, COVID19, that arouses fear, is shrouded in uncertainty, and, yet paradoxically full of opportunity potential
- 2) Gain insights into how experienced entrepreneurs go about the task of solving challenges (effectuation)
- 3) Enhance your ability to distinguish between ideas & opportunities
- 4) Develop your ability to communicate with impact and confidence

deliverables & evaluation

Course deliverables involves both **individual tasks (60%)** and **group project (40%)**

Each participant will need to complete the following:

1. For the **Rethinking Air Travel Creativity Challenge** (Week 2), we will examine an industry that has been severely impacted by the COVID19 pandemic, airlines. Based on your experience as an air traveler, what can the airline industry do to increase consumer confidence to fly again? Each student needs to propose at least 20 creative ideas AND from among them pick one providing a convincing pitch as to why it should be taken up and how it is should be adopted. **10%**

2. For the R&R case (Week 3), address the question “To what extent does Robert Reiss behave according to the principles of effectuation?” (3 pages maximum excluding exhibits) **20%**

3. Watch the “Mission to the Edge of Space: The Inside Story of Red Bull Stratos (2 hour video) at: <https://www.redbull.com/car-en/films/mission-to-the-edge-of-space> - and address the following question: “What insights can aspiring entrepreneurs take away from the Red Bull Stratos project to guide their pursuit of entrepreneurial opportunity? (4 pages maximum excluding exhibits) (Week 5) **20%**

4. **Ideation Learning Diary** - to gain insights into the process of ideation I would like you to provide me with a personal (your own words) perspective on how you and your group approached the task of Rethinking the Concept of “New” Normal. What worked especially well and why? What aspects did not work well at all and why? What would you have done differently? **In my experience, keeping brief notes as you go through the process stimulates and enhances the reflection process. There is no page limit per se but you get out of it what you put into it!** (Week 6) **10%**

Rethink the Concept of “New Normal” University (Group Task 40%)

The **group task** will be discussed at length in the introductory session but will be focused on the challenges (opportunities in disguise) being experienced in economies around the world as we adapt to a rapidly evolving “new” normal.

“New Normal”

When we speak of normal, we think of something that “conforms” to a standard, common type, or regarded as regular or usual in nature. Adding the modifier “new” denotes a process of change from an existing to an imagined future state. This is exactly the context within which creativity is most needed and fresh perspectives can flourish.

I don’t know about you, but it seems to me that the world has been in “Breaking News” mode continually this year. Working From Home (WFH) has also given me the time to think, reflect and pay even more attention to the news than ever before. I have also discovered the importance of maintaining connections in a different way, although I must say I long for the day to safely embrace face-to-face interaction, especially in the classroom again.

I see strong parallels between the COVID19 pandemic and weather forecasting. Meteorologists try and predict the weather based on sophisticated models. The predictive models have a lot of noise in them as the phenomenon is complex and at times highly uncertain (a prominent meteorologist never used the word guaranteed on air!). Adverse weather events can cause stress (it was hard to sleep when I spent the night in Austin when a tornado hit!). Weather is something we pay close attention to as it alters our own behavior (choosing what to wear for example).

“COVID19 Weather Bulletin”

COVID19 fits the bill as an extended adverse event – consider the following:

- The BBC (Aug 2020) reports leading economies experienced sharp contractions in GDP for the half of 2020: UK -22.1%, Italy -17.1%, Germany -11.9% and the US -10.6%. **Breaking news (14.8) Finland's GDP “only” fell by 5%**
- Relief and stimulus spending combined with a slump in tax revenues translate into a worldwide \$10 trillion deficit in 2020 growing to a short of \$30 trillion by 2023 according to McKinsey (July 2020)
- Customer facing industries like tourism, travel, education, retail and services have been particularly affected as a result of the impacts of stay-at-home measures (lockdowns, quarantines) and social distancing – consider the following:
 - Tourism made up 10% of global GDP in 2019 worth almost \$9 trillion or more than 3 times larger than global agriculture
 - As of April 2020, 91% of world's population lived in countries that limited or forbid the entry of non-citizens or non-residents
 - International tourist arrivals are expected to plunge by 60%-80% in 2020 and unlikely to return to pre COVID levels until 2024 putting 120 million jobs at risk (not to mention the ripple impact on tax revenues)
 - In the US alone, travel spending is expected to drop \$400 billion with an overall expected loss of \$900 billion to economic output with multipliers
 - Worldwide airline capacity is down 70%-80% with numerous airlines going bankrupt, furloughing staff, grounding fleets, and cancelling new aircraft orders. Airline capacity was down 70% in the immediate aftermath compared to 19% after the 9-11 attacks and 11% after the global financial crisis of 2008. Bearing in mind the metric that airlines need to operate at 75% of capacity to begin to make money gives you a sense of the scale of the challenge.
 - Given both restrictions on travel and reluctance of consumers to venture out of homes, it is no surprise to see occupancy rates of only 15% for luxury hotels and 40% for economy options (May 2020). 90% of the hotels in the US are franchised largely by small independent operators. A big source of concern is the \$350 billion debt burden overhanging the industry. With so few customers, how can you afford to operate? Stay in business? Repay debt?
 - The restaurant industry has been hit with a tsunami – 8 million restaurant workers have been laid off or furloughed since March. Fine dining and casual eat in restaurants have seen revenues drop 70%-85% particularly in densely populated cities like New York. The forecasts at the moment are that 1 in 5 restaurants will be permanently shuttered this year.

- Even new promising sectors like micromobility (scooters) that was projected to grow to become a \$300-\$500 billion market by 2030 have seen passenger kilometers traveled drop by 50-60% since the beginning of the year with resulting falls in company valuations, employee headcounts and “compelled” consolidation taking place (if you can't raise funding, sell).
- Large department stores appear to be a boom for liquidators but not for consumers. Two big names Neiman Marcus and JC Penney have filed for bankruptcy protection. A number of other prominent retailers have joined them including Brooks Brothers, Muji, Aldo, JCrew, Pier1 Imports, and Papyrus, among others and with many others expected to follow suit.
- The disappearance of large department store anchors (that account for 30% of the mall square footage in the US) has also impacted the viability of shopping malls. Some experts expect that 1 in 4 shopping malls are in danger of closing down in 2020. Even remaining tenants are pressuring mall owners to reduce rents based on co-dependency clauses that depend on the presence of a mall anchor. Landlords are really feeling the squeeze.
- Stay at home orders and strong encouragement by governments for employees to work from home (WFH) – have also created numerous challenges. With the buffer zone between “work” and “home” being dramatically reduced especially for those with school age children, finding the space, the ability and the dexterity to manage competing demands in the moment has been a challenge. If WFH becomes a “new normal”, there are predictions of fall offs in demand for office space, business travel (network from home NFH), and public transport, among other impacts.

The “New Normal” University

**“The notice went out on 6 March, a Friday afternoon. All classes at the University of Washington in Seattle, the city then the US epicenter of the outbreak of COVID19 – would shift online the following Monday. Instructors scrambled to set up remote learning options for more than 40.000 students (over a weekend).”
Nature (2020)**

The pandemic has forced universities to fundamentally “rethink the game” of higher education on the fly. Consider the following:

- In an effort to contain the spread, practically all face-to-face teaching was moved to digital in a matter of weeks in early 2020. **Lecture Room** was replaced with **Lecture Zoom**. The speed with which this transition was made was breathtakingly fast in a traditionally slow-paced university environment. It is interesting to note that the digital educational experience has been around a long time – University of Phoenix pioneered this in 1976! **Why were universities so late on the uptake?**
- The “traditional” formula of competition in higher education is: 1) maintain as high a ranking as possible, 2) attract as much endowment support as possible, 3) hire world class faculty on tenure track, 4) conduct research that attracts funding and recognition, 5) deliver impactful education in classrooms (buildings), and 6) a well-rounded experience (dorms, extracurricular and socializing). **How can you transform a high touch experience into a low or no touch one?**

- Travel restrictions have wreaked havoc both for students who are not allowed to travel to pursue studies and faculty who are restricted to participate in professional and academic conferences at a distance. **Does the concept of exchange need a rethink?**
- The economic impact and uncertainties associated with COVID19 have also severely impact the internship market. **How will the concept of work change? What skills are required to navigate a socially distanced new normal?**
- Aalto like many universities around the world relied on Zoom in place of face-to-face interaction. Zoom was never really designed with higher education in mind but proved a useful patch as universities take on the challenge of transforming to digital. Incidentally, Zoom's stock is up by 400% since the beginning of the year. **But "Zoom university isn't proper online learning" says MIT Vice President for Open Learning. What should the design of future university education look like?**
- A recent report released by the Institute for Fiscal Studies in the UK (July 2020) predicted that 13 UK universities face "a very real prospect" of insolvency – particularly those with large numbers of foreign students and of relatively lower prestige in rankings tables. Potential revenue losses this year are estimated at £11 billion. Australian universities are expected to shed 21.000 full time jobs this year, including 7.000 in research due to the revenue shortfall caused from the decline in international students. **Do we have too many universities?**
- University of Cambridge has cancelled all face-to-face lectures for the entire 2020-2021 academic year. University of California system and a growing number of others have followed suit. **Will the face-to-face interaction element of university education be forever changed?**
- Moody's – the rating agency – downgraded the US higher educational outlook from "stable" to "negative" in March with 30% of US universities' operating performance as weak. **What is required to turn the outlook back to stable or ideally, positive?**
- As decisions are made to move to online modes, students and parents are demanding tuition fee waivers or reductions. At Rutgers University, 30.000 signed a petition calling for the elimination of fees and a 20% cut in tuition. One university student commented "Who wants to pay \$25.000 a year for glorified Skype?" And the US, being the US, lawsuits have been launched against universities for breach of contract for switching in-person instruction to online! **Can universities develop impactful models at lower price points?**

Hybrid

A great deal of strategic thought is taking place in higher education circles (and at Aalto) on exploring "hybrid" models of operating by reframing the discussion from "digital **versus** face-to-face" to "digital **and** face-to-face". I am working from the presumption that we will not return to the traditional ways of interacting in a classroom. There are some very interesting and challenging issues to think through in redesigning the experience of higher education, including, but not limited to:

- What topics and material best lend themselves to self-paced and/or digital delivery platforms?
- What topics and material best lend themselves to high touch face-to-face interaction?
- What tools are available to create the truly interactive feel of the classroom online?
- How do you build a sense of community while respecting social distance?
- A lot has been written about working from home (WFH) – what are the elements to effectively study from home (SFH)?
- How do we reconfigure space on campus to adhere to the new normal?
- What new skills, experience and competencies do intentional lifelong learners need to know in the new normal?
- Are universities and their backers going to be encouraged to focus on research projects most relevant to their national interests going forward?

Your team will have **complete freedom to interpret the brief** “rethink the concept of new normal university” any way you like. Opportunities never appear as pre-packaged Ikea furniture with clear assembly instructions. Together we will uncover a destination and create a roadmap – that is where the key learning of the course lies. You will discover that good ideas are not necessarily the same as genuine opportunities and together we will work through this challenge.

The Team

- 1) You will be working in teams of ideally 6 students – “founding teams” display diversity and this will be no different in terms of gender, nationality and discipline (to the extent possible);
- 2) I will join each team as a mentor providing constructive (some may consider it brutal) feedback throughout the process.

The Task

- 1) By the end of the course, your team should be prepared to present an opportunity nugget to the class; the challenge every entrepreneur faces is that opportunities are perceived and the lens through which they are seen are utterly unique to every person. Successful entrepreneurs explore possibilities (creativity) **before** deciding what to do (innovation). The best opportunities are those that resonate deeply with the passions, skills, experience and networks of the team (is it worth doing?) **and** can be activated (is it doable?)
- 2) As mentor, I will guide teams through the discovery process and we will work “in camera”; I will be the only person who knows what each team is working on.
- 3) Final presentations will be arranged through Zoom or Teams in the form of Pecha Kucha – a highly visual story telling format that requires you to communicate messages in 20 second sound bites. Some examples and guidelines of this format can be found at: www.pechakucha.org.
- 4) **ABOVE ALL ELSE HAVE FUN WITH THIS AND DON'T CONSIDER IT A “TASK”!**

Schedule of Coming Attractions (subject to revision)
ALL SESSIONS WILL BE HELD ONLINE

8 September	Course Introduction Means: Your Personal Lens of Opportunity
15 September	Rethinking Air Travel Creativity Challenge
22 September	Shaping Opportunity Co-Creation Co-creation Challenge Case: R&R (Harvard Business School)
29 September	Executing Opportunity The Art of Lean
6 October	Team Consultations
13 October	Final presentations