Business Model Innovation in an Exponential world

What to expect

The economic and political reality is becoming increasingly complex, not just complicated.
The economy is challenged by important uncertainty in many fields: unstable economic development, fast changing geopolitical situation, political instability in many countries, major questions on the ethics and values of what is done, climate and the relationship to the planet, disruptive technologies and a disruptive societal situation. The challenges of today are wicked in nature: we have no upfront idea where the solution might be found. Most of the technology management approaches and methods are not based on this reality of a complex, systemic world, and therefore do not always equip engineers ideally.

In order to harness the reality of today, in order to create the future, rather than be subjected to it, engineers need to understand what innovation means in an ever changing, uncertain world, disrupted by exponential technologies. They need to know how to construct business models that matter, using technologies for positive impact. Additional to their technological specialization, engineers need to develop an understanding of, and a competence in, turning the great potential of (exponential) technologies into business models to bring to market.

The outcome of the training course, is to develop the mindset with which engineers can comfortably explore, understand and act in a hyper-complex world, disrupted by exponential technologies, while becoming the entrepreneur and creator of sustainable, scalable solutions. This transformation of people, eventually, will be the engine for corporate and societal transformation. 'Business model innovation in an exponential world' gives the insight needed and allows to experience it first-hand.

> **Make sure that in every meeting, or every project, someone takes the role of the seventh generation (The Great Law of Haudenosaunee Confederacy).**

Two intertwined transformational journeys

All participants in this Business Model Innovation course engage to start and walk two transformational journeys: one of co-creation of a prototype of a real solution for a real wicked problem; one of personal transformation (if we are not having some introspection, we will continue to do what we always did). This course script supports this transformation of the individual and the realization of a business model for a wicked problem. A learning log (in which participants log their progress, their learning, their discovered knowledge, the competencies they have developed, etc.) is given under the form of a 'Roadbook' that supports the participants in their personal journey.

The two journeys (the personal transformation and the project prototyping journey) are interwoven and feed into each other in four ways:

1. Crucial in business innovation are the personal commitment, values, drive and vision of each participant. A transformational journey will therefore only have an impact if the participants show up as they are, with their strengths and weaknesses, their human qualities, their emotions, etc. And not just as a function, a manager, a researcher, or whatever. Each participant needs to be his or her authentic me, which will allow him or her to embark on an honest personal transformation, to contribute to the group project usefully, and also honestly define the personal learning and transformational trajectory and take responsibility for its management. Authentic values-based engagement is key to the success of this course.

2. The journeys that each participant will embark on, need to be in their personal (and possibly professional) interest, in order to generate the necessary commitment. Each transformational journey is one's own experience, one's own commitment and one's own interest. The better a participant is able to meaningfully contextualize his or her journey, the more he or she can benefit from the experience. Nobody can define the program for a participant, other than him or herself. Hence each 'program' is individualized, albeit that participants work together in groups. Successful cross-fertilization between the personal and the group transformation trajectory allow the participant to optimize the transformational experience.

3. Unfortunately, during the last few years people have lost a lot of our natural knowledge concerning our interaction with the environment (social as well as biological environment). We don't use our senses as we could, and certainly not as people living close to nature do. We observe that in what we eat, what we taste, the noise levels that are common today, the urbanization and the alienation from nature. But our senses are our gateway to our environment. Hence the potential quality of our engagement with the outside world, the others, depends heavily on our capacity to fully use our senses. We have become human doings, rather than human beings. Innovation needs a correct connection with the environment in order to be impactful. We need to redevelop that humanitarian capacity (and there is certainly also an ethical dimension in there), our competence for human being. We have to consider qualities like: impact, belonging, inclusion, purpose, meaning, contribution; all defining elements of our relationship with the others.

4. Eventually, participants learn with a purpose. On the one hand that purpose is going to feed our transformation, and the potential for successfully developing an impactful prototype. If we keep in mind where we would like to get to, we are able to decide what to do now. When Alice in Wonderland asks the cat which road to take, the cat ask where Alice would like to go to. When Alice responds she does not know, the cat says: 'Then every road is a good road.' We need a purpose, a meaning, not that much to reach the purpose, but in order to allow us to decide, right now. Whether we reach the goal is not important, and even less so manageable, since we lay down the path in walking. On the other hand, any journey is only the beginning of a lifelong transformational attitude, that will support us in the need for continuous adaptation, for lifelong learning. Transformation takes time; time gives us the potential for transformation. Time plays a constructive role in our being and becoming, as Prigogine explained.

Now, we are ready for the last preparations

This course is given to you, for self-managed exploration, under the creative commons idea. Feel free to use it as you wish and share it with others. While we feel that this material should be made available for self-exploration, we are aware that the purpose, process and mindset

of the course might be less familiar and used in business innovation today, and that therefor mentoring and coaching might not be a luxury. Eindhoven Engine Academy can deliver this kind of coaching and mentoring on request and at a fee.

In order to experience the full potential of this course, the following documents are made available, in order to support each step of the process. We advise you to carefully follow the process as suggested, since there are good reasons for the process as it is set up. The script to follow, will contain links to the different supporting resources. For your guidance we have made available:

- Personal transformation webinar
- Personal transformation roadbook (workbook)
- Project transformation webinars
  - Theoretical scope on the context + assignment 1
  - Insights in some tools + assignment 2
  - The potential of collective intelligence + assignment 3
  - Organizing self-organization + assignment 4
  - Biomimicry based ideation + assignment 5
  - Business Model Canvas + assignment 6
- Personal transformation PowerPoint (used in the webinar)
- Project transformation PowerPoint (used in the webinars)
- A series of resources that are referred to in the course, or are additional but relevant

At any time, the PowerPoint presentations can be consulted, but are also used in the webinars. They are just given for reference. They are given to support the webinars and the assignments.

The absolute minimum time that we anticipate is needed for each seminar is two hours (webinar + group work on the assignment). All additional time will be extremely beneficial.
It is fair to anticipate that some more work should be done between the seminars. The seminars are ideally organized on a weekly basis (though that is also completely free). We have experimented ourselves with the 6 seminars on 3 days, though it cuts the parallelism with the personal transformation journey. The weekly rhythm supports ideally the impact of the personal transformation journey.

The webinars as structured, are the minimum steps to be taken. On the PowerPoints, additional possible activities are suggested, and in the additional resources those activities are explained. Feel free to engage with those activities, since the deeper you go in the process, the more beneficial the experience will be.

Concerning the personal transformation journey, one should anticipate at least 12 hours (6 assignments of 2 hours). The personal transformation assignments are integrated with the project assignments, in order to make sure they are experienced in parallel and reinforce each other. While we suggest starting with the personal transformation journey webinar, this is only the kickoff activity. No assignments are due while viewing this webinar. They are explained in this webinar, but you are invited to make them as mentioned during the project journey.

Let us go: the script of the Business Model Innovation in an Exponential World course

Your journey starts here. Watch the webinar on the personal transformation journey. The assignments that you do, are integrated in the different project journey assignments, in order to make sure that you follow this personal process alongside the project journey (and not as a separate course). In order to support your personal transformation journey, a personal transformation roadbook (workbook) is made available. Easiest is to use this document to complete throughout the different personal assignments. The supporting PowerPoint presentation can be seen here.

Next, you study the webinar Theoretical scope on the context. At the end of the webinar, the assignments are given, both for this project journey AND for the first step of the personal journey. In the Project Transformation PowerPoint you can also find the assignments, in case the webinar went too fast. Before moving to the next webinar, you should complete the assignment(s) for your project journey, as well as those for your personal transformation journey.

In the same idea, you (the team) goes through the following five webinars:
- Insights in some tools
- The potential of collective intelligence
- Organizing self-organization
- Biomimicry based ideation
- Business Model Canvas

This brings you to the end of the course. You should now have a personal development plan, ready for you to execute. You should also have one or a few possible solution scenarios for your wicked problem, including a business model canvas for each. Finally, and most importantly, you will have experienced an approach for agile innovation of wicked problems that is easy and impactful, and that can be used for many other wicked problems.

List of course related resources

- Personal Transformation Roadbook (workbook)
- Personal Transformation Webinar
- Project Transformation Webinars:
  - Insights in some tools
  - The potential of collective intelligence
  - Organizing self-organization
  - Biomimicry based ideation
  - Business Model Canvas
- Project Transformation Powerpoint

List of additional resources (referred to in the webinars and PowerPoints)

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- [Biomimicry38 Lifes Principles](#)
- [Causal influence diagrams](#)
- [Causal loop construction](#)
- [Delft Design Guide](#)
- [Eco-design, what is it?](#)
- [Empathy map 1](#)
- [Empathy map 2](#)
- [Five steps to eco-design](#)
- [How to make causal loop diagrams](#)
- [Prototyping and learning](#)
- [SCAMPER tool](#)
- [Soft systems methodology source 1](#)
- [Soft systems methodology source 2](#)
- [Stanford bootcamp method](#)
- [Systems Dynamics book Eric Pruyt](#)
- [Values Based Leadership in business innovation](#)