

Master Thesis Diederik Notten
Strategic Product Design
Delft University of Technology

The handover moment

Appendix

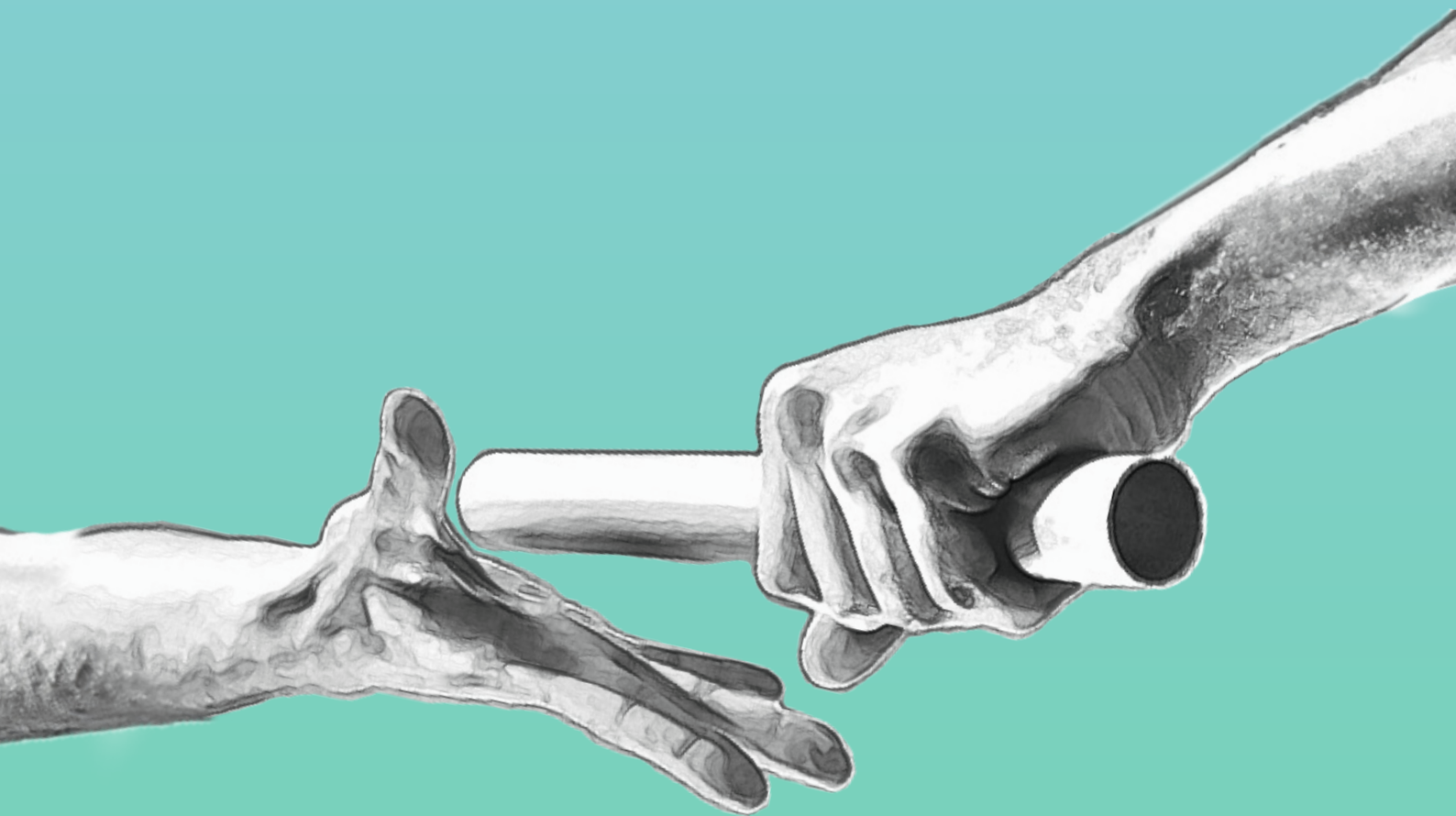




Table of Contents

- A. Project brief
- B. Semi-structured interview guides
- C. Documented bottom-up innovation process
- D. Set-up for testing principles
- E. Evaluation of principles



A. Project brief





IDE Master Graduation

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT

Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME
 Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy". Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1!

family name	Notten	Your master programme (only select the options that apply to you):	
initials	D T	IDE master(s):	<input type="radio"/> IPD <input type="radio"/> DII <input checked="" type="radio"/> SPD
given name	Diederik	2 nd non-IDE master:	
student number	4564871	individual programme:	- - (give date of approval)
street & no.		honours programme:	<input type="radio"/> Honours Programme Master
zipcode & city		specialisation / annotation:	<input type="radio"/> Medisign <input type="radio"/> Tech. in Sustainable Design <input type="radio"/> Entrepreneurship
country			
phone			
email			

SUPERVISORY TEAM **
 Fill in the required data for the supervisory team members. Please check the instructions on the right!

** chair	Mieke van der Bijl-Brouwer	dept. / section:	MOD
** mentor	Willemijn Brouwer	dept. / section:	DOS - MCB
2 nd mentor	Anton Molleman		
	organisation: <u>Immigratie- en Naturalisatiedienst</u>		
	city: <u>The Hague</u> country: <u>The Netherlands</u>		


- Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v.
- Second mentor only applies in case the assignment is hosted by an external organisation.
- Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

comments (optional)
 |
 |
 |

Procedural Checks - IDE Master Graduation



APPROVAL PROJECT BRIEF
 To be filled in by the chair of the supervisory team.

chair Mieke van der Bijl-Brouwer
 date 30 - 03 - 2023
 signature 

CHECK STUDY PROGRESS
 To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair. The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: _____ EC
 YES all 1st year master courses passed

Of which, taking the conditional requirements into account, can be part of the exam programme _____ EC
 NO missing 1st year master courses are:

List of electives obtained before the third semester without approval of the BoE _____

name _____ date _____ signature _____

FORMAL APPROVAL GRADUATION PROJECT
 To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **. Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks?
- Does the composition of the supervisory team comply with the regulations and fit the assignment?

Content: APPROVED NOT APPROVED

Procedure: APPROVED NOT APPROVED

name _____ date _____ signature _____

Initials & Name D T Notten Student number 4564871

Title of Project Designing a tool to support implementation at the IND

Designing a tool to support implementation at the IND project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 08 - 03 - 2023 26 - 07 - 2023 end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

CONTEXT

In 2022, the IND embarked on a robust change journey that engaged the entire organization. It started with formulating their own change story, a culture scan that gave them insight into the necessary culture change, a thorough approach, and mobilizing their executives and teams. Through this task, they want to become a more reliable, responsive, and innovative organization. They are doing this by experimenting with and learning from other ways of working on a small scale within the teams. For them, it is a multi-year process in which, by taking small steps, they ultimately achieve large-scale, meaningful change. They do this by 'just doing it' within the fixed current structures (line organization).

As stated above, one of the core themes of this journey is to become a more innovative organization. A key aspect of innovation is experimenting and leading ideas to implementation. The IND has several internal departments that focus on experimentation, but they all run into the same problem. The IND gives space and opportunities for innovation, but often after a successful experiment, it stalls. No one sits on the implementation and no manager is involved. Support among IND employees in the field of innovation is also not always high, for example, employees often do not feel like or are not open to certain innovations. Within the IND, it is also often said that they would like to cooperate with the innovation program, but do not want to be part of the program. In addition, it is also not always the IND's priority to re-run a successful project because they have priorities on their own KPIs.

STAKEHOLDERS

Based on discussions with Anton Molleman, the Programme Director Innovation IND, a preliminary organization chart was created. It can be seen in Figure 1 on the next page. A session with Anton will be planned as soon as possible to make an actual stakeholder map.

OPPORTUNITIES

Designing a tool that increases the chances of implementation for the IND. The aim of the tool will be to prepare the experimentation/innovation team for the eventual implementation. This will be done through a thorough analysis of current and past experimentation processes, interviews with main stakeholders, and eventually co-creation sessions with these stakeholders to identify the best format for the tool.

LIMITATIONS

The IND is an operational organization, so laws and regulations might get in the way of innovation. Also, getting people on board and giving their time for my project is also expected to cost a lot of time. For this, I have to get my story straight and rely a bit on the help of Anton to introduce me.

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introduction (continued): space for images

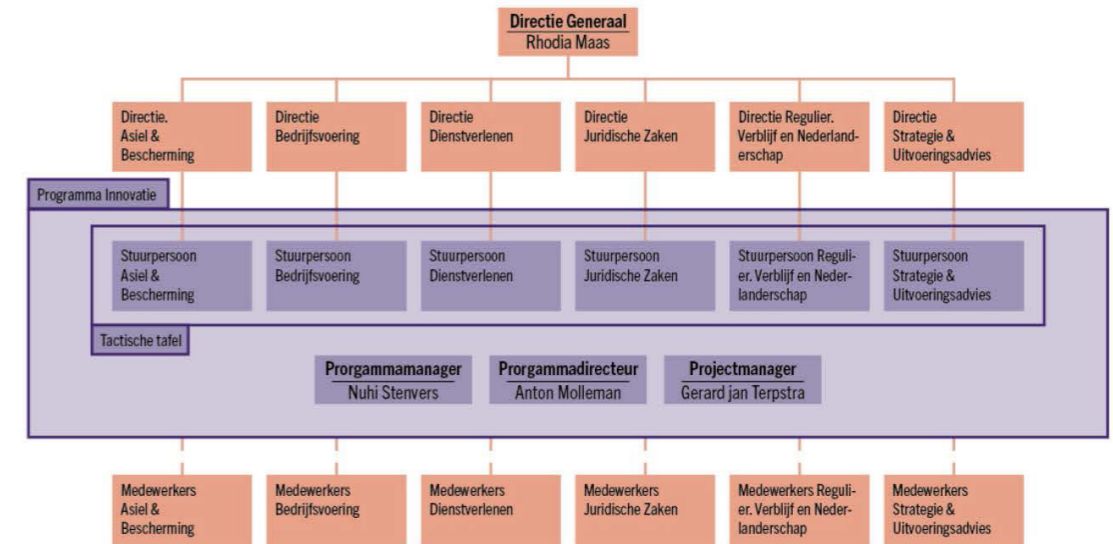


image / figure 1: Preliminary organisational chart

TO PLACE YOUR IMAGE IN THIS AREA:

- SAVE THIS DOCUMENT TO YOUR COMPUTER AND OPEN IT IN ADOBE READER
- CLICK AREA TO PLACE IMAGE / FIGURE

PLEASE NOTE:

- IMAGE WILL SCALE TO FIT AUTOMATICALLY
- NATIVE IMAGE RATIO IS 16:10
- IF YOU EXPERIENCE PROBLEMS IN UPLOADING, CONVERT IMAGE TO PDF AND TRY AGAIN

image / figure 2: _____

PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

PROBLEM

The IND wants more innovation capability in order to address (wicked) problems they are experiencing. Currently, there are already experiments being done by internal departments, but they all encounter the same problem, being a lack of implementation. Why is this the case and what can be designed to follow this up with successful implementation?

Through interviews with the main stakeholders, an analysis of past failed and successful implementations and the current way of working/implementation will be analyzed. Afterward, through co-creation sessions, a tool will be developed to support and prepare the innovation team for the eventual implementation phase.

RESEARCH GOAL

Design a tool for the IND that increases the success rate of implementation of successful experiments at the IND. The form of the tool will be later determined, but I expect it to be something that supports and can be viewed during experimentation to better prepare the team executing the experiments.

SUB QUESTIONS

- Who will have ownership in governing the innovation process?
- What main stakeholders are necessary for a successful experiment/ implementation?
- At what points in the experimentation process should other stakeholders be included?
- How can the IND be more clear to employees when it comes to innovation?
- What form the tool should take for ideal use within the IND

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

RESULT

Design a tool that increases the likelihood of successful experiments being implemented within the IND. The exact form of the tool will be later decided on through an analysis of the current situation and further co-creation sessions with the essential stakeholders. This is part of the double diamond design process.

For my thesis, I will start with a research phase of a suitable time. Within this, I will use literature research, case studies and interviews/surveys to find out the following: Organisational goals and objectives, Resources and capabilities, Stakeholder analysis, Legal and regulatory requirements, Technological infrastructure, Risks and mitigation strategies.

Afterward, I will define the project by choosing a direction to focus on and synthesizing opportunities from the analysis. This will set me up to reframe the problem, which I then can validate with the internal stakeholders.

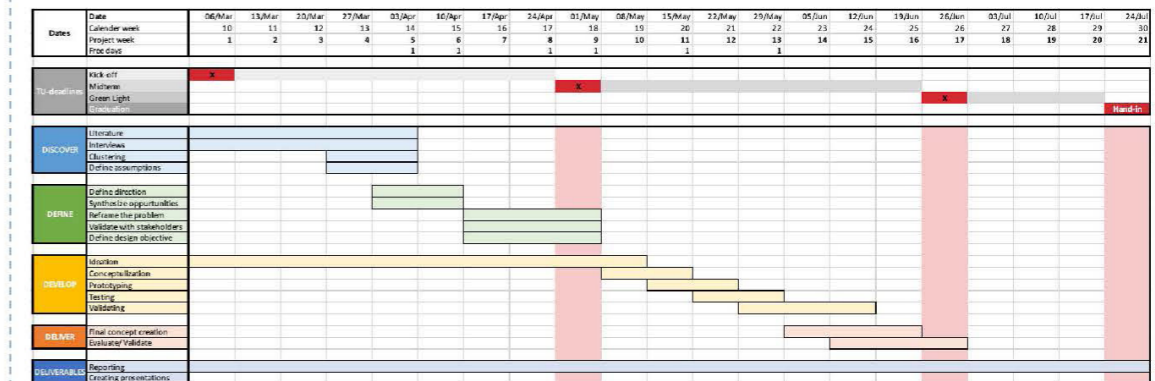
Third, I will start my development phase. Here I will focus on developing ideas, concepts and prototypes for the identified solution space. They are created through individual brainstorming and creation sessions, next to sessions with internal stakeholders to create and validate.

Eventually, the end result of a tool will be designed. The exact content will depend on the outcomes of the earlier stages of the project, such as the preferences of stakeholders.

PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date 08 - 03 - 2023 end date 26 - 07 - 2023



I am planning to mostly focus on the research and ideation phase within my project. I expect to have as much contact with IND coworkers as possible to gain valuable insights. I want to keep these people on board throughout my project, so I can organize further workshops and validation sessions.

General ideation will be done throughout the project, because as a designer you are always thinking about possible outcomes for what you are analyzing. These will be logged on a Miro board, together with the insights they are based on.

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, Stick to no more than five ambitions.

WHY THIS?

I have been fascinated by political systems for quite some time now. I vividly remember a discussion I had with my younger brother just before the start of the pandemic where I stated that a more agile way of working for governments with quicker decision-making is necessary to keep up with today's rapidly changing society. He said it couldn't be done, and just a few weeks later an outbreak management team was created and decisions were made on a weekly bases that resulted in almost immediate changes in ways of working and current processes. So I asked myself; why can't this also be done without a crisis being present?

COMPETENCES

The following skills I have built up so far will come in handy during the upcoming project:

- I am a curious person and perfectionist, which ensures that I always keep figuring out and working until the overall image is right.
- I have strong analytical capabilities, which I think can be of great help during my graduation. I quickly see connections and relationships between important aspects, which ensures that I often do not have to dwell long on analyses.

The following competences I intend to improve during my graduation:

- I want to get better at planning. It's important to break down tasks into smaller, more manageable steps, set clear deadlines, and prioritize tasks based on their importance and urgency, which thus far I have never actively performed. I hope this helps with my aptitude to procrastinate.
- Second, I wish to become a better communicator with other people. I tend to forget to clearly communicate with stakeholders because I have everything in my own head. Clearly writing down findings and logging will hopefully help with this, so I intend to do that more and better.
- Presenting is also a skill I want to improve more on. Taking time to sit down and write out what is important to present is something to start with, till I eventually.

AMBITIONS

- I want to experience the governmental environment to know if it is something for me to consider afterwards.
- I want to question the feasibility of working in a designerly way within a governmental organisation, to know whether a new way of working and deciding is possible.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

B. Semi-structured interview guides

Einsteinbrigade

- What do you define as innovation?
- What exactly is your role within the IND?
- Do you have a standard working method/process?
- When does your work begin and when does it end?
- Who is/are needed for implementation?
- Why do you think implementation is not going the way you want?
- On the basis of which criteria are choices made for implementation?
- Which persons within the organisation are interesting to talk to?

Programme Managers

- What is your role within the organisation and a programme?
- What is the origin of a programme?
- How does a programme run?
- How flexible are programmes?
- What aspects go well and not so well within a programme?
- What areas for improvement are there for programmes within the IND?

Enterprise architect

- What is your role within and relation to the organisation and its employees?
- From what point will you be involved in change and by whom?
- What is your working method and with whom do you mainly cooperate?
- What bottlenecks do you mainly experience regarding innovation and implementation?
- What factors promote and hinder implementation?

Portfolio Management

- What is your role within the organisation?
- What is the origin of the content of the portfolio?
- Do the various initiatives often run out of steam, and if so, why?
- How is the content of the portfolio determined and what process is involved?
- How is the portfolio prioritised?
- How is implementation in the organisation and who supervises it?
- How is innovation dealt with in the portfolio?
- What could be improved within the organisation?

Project Managers

- What is the origin of projects?
- When do Project Managers get involved in a project?
- How does a project normally run?
- How flexible are projects?
- What aspects go well and not so well within a projects?
- Are there recurring themes that cause projects to stall?
- What does a project deliver?
- What areas for improvement are there for projects within the IND?

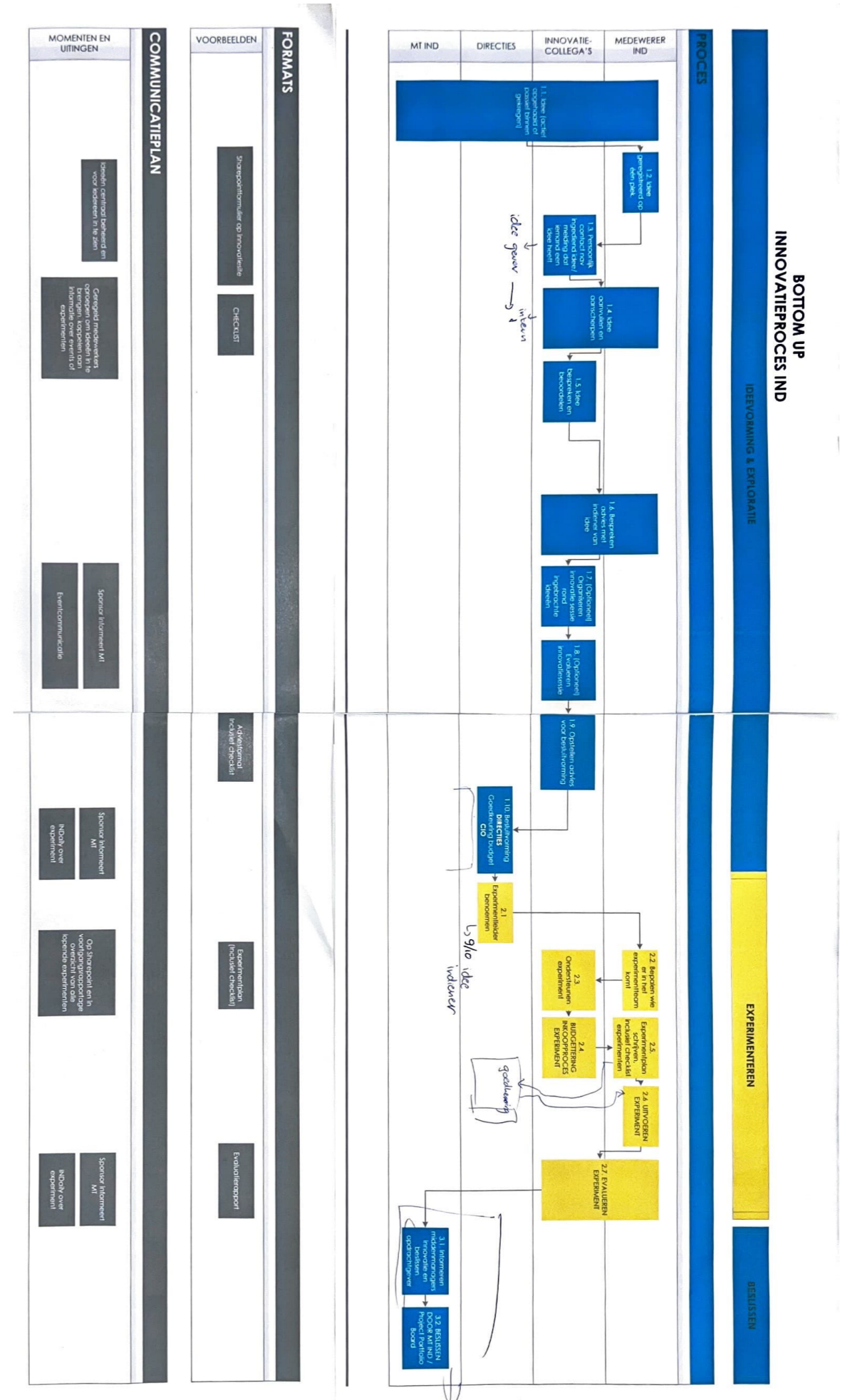
C. Documented bottom-up innovation process

LEAN expertise centre







- What is your role within the organisation and a programme?
- From what point will you be involved in initiatives, by whom, and what initiatives are you particularly involved in?
- What is your working method and with whom do you mainly cooperate?
- How does your method and approach help improve the organisation?
- How do you deal with the client's demand, and with the client himself?
- What can be done by the IND to use the available resources more efficiently?
- What can you recommend to the IND to promote successful implementation?

Line Director IV

- How do you get involved with the Einstein brigade's work?
- How is the work of the Einstein brigade different from the rest of the organisation?
- What goes well and not so well around bottom-up innovation?
- What is your definition of innovation and how do you treat it within the organisation?
- In an ideal organisation, what would bottom-up innovation and implementation look like?



D. Set-up for testing principles

	Expected benefit	The compatibility	Sensing surprise	Perceiving multiples	Embodying alternatives	Verbal mastery
Introduction	Thanks for coming. As you know, we have recently been working on an experiment for subject matter podcasts. Brief summary of what we have been doing and why. The aim of the experiment is to investigate whether listening to a content podcast adds value for JZ staff. Think more effective dissemination, less stress, and healthier and more fun work. We tested this using a survey and 3 podcasts. But what came out of this?	Thanks for coming. As you know, we have recently been working on an experiment for subject matter podcasts. Brief summary of what we have been doing and why. The aim of the experiment is to investigate whether listening to a content podcast adds value for JZ staff. Think more effective dissemination, less stress, and healthier and more fun work. We tested this using a survey and 3 podcasts. But what came out of this?	Thanks for coming. As you know, we have recently been working on an experiment for subject matter podcasts. Brief summary of what we have been doing and why. The aim of the experiment is to investigate whether listening to a content podcast adds value for JZ staff. Think more effective dissemination, less stress, and healthier and more fun work. We tested this using a survey and 3 podcasts. But what came out of this?	Thanks for coming. As you know, we have recently been working on an experiment for subject matter podcasts. Brief summary of what we have been doing and why. The aim of the experiment is to investigate whether listening to a content podcast adds value for JZ staff. Think more effective dissemination, less stress, and healthier and more fun work. We tested this using a survey and 3 podcasts. But what came out of this?	Thanks for coming. As you know, we have recently been working on an experiment for subject matter podcasts. Brief summary of what we have been doing and why. The aim of the experiment is to investigate whether listening to a content podcast adds value for JZ staff. Think more effective dissemination, less stress, and healthier and more fun work. We tested this using a survey and 3 podcasts. But what came out of this?	Who here works mainly on their laptops? So do you ever get back from holiday and spend a whole day or two reading and answering emails? Why is it that we all mainly use emails to use people? At the end of our meeting, I showed you that this can also be done in other ways that make work more effective and healthy, make it more enjoyable and make it easier to remember material.
Dialogue	<p>To start with, we conducted preliminary research with 89 people, all of whom indicated that a large part of their work involves reading and sending e-mails, on which they also indicated that they would like to see this changed. 82%(73) confessed that because of this, they do not read some mails that they would actually like to read. Finally, 90%(80) of the participants felt that, partly because of this, they have to sit too much in a day, but also that sometimes the information does not stick properly.</p> <p>We then presented podcasts to all these 89 people, of whom 70%(62) said they listen to podcasts. 98%(87) of the participants combined listening with another activity, which they found very nice to be able to do, and therefore freed up time to listen to them. In addition, 85%(76) found it a nicer way of absorbing information instead of reading an email, and are 92%(82) that they had remembered the information better.</p> <p>So we can conclude that podcasts as a medium for information dissemination is more effective, healthy, inviting and fun than reading emails. Shall we get started with this?</p>	<p>Before we tell you that, we are going to play a game. I take it you're familiar with cap-on-hat? I'm going to ask you some questions, and then I'd like you to answer them using cap-on-hat-off. Here, cap on is yes, cap off is no. Got it? Good. Then let's get started.</p> <p>Do you feel that a large part of your work consists of reading and sending e-mails and reading documents?</p> <p>Do you also sometimes skip an e-mail because you don't feel like it, or because you don't think it's important enough?</p> <p>Do you also find that the current way of working forces you to sit too much in a day?</p> <p>Have you ever wondered if this could be done differently?</p> <p>Do you ever listen to podcasts?</p> <p>Nice. As it turns out, all your answers match those of the participants in our experiment. Think how nice it would be if you didn't have to read endless emails to absorb information, but could listen to something for a change and not be stuck at your desk that way. Shall we get started with this?</p>	<p>I can present at length about this, but I can also let you experience it. This is what we are going to do. You will later stay in your seat and get my laptop in front of you with a piece of text on it. The aim is for you to read the whole text, but there is a condition. Namely, you must not move while reading. The slightest movement will finish you off and you have to start again. You have 3 attempts to get as far as possible. Got it? Great, then let's get started.</p> <p>How did you experience this?</p> <p>What does this remind you of when you have to relate it to work?</p> <p>What did you notice in your muscles?</p> <p>What we have just tried to mimic here is the strain on your body of sitting for long periods of time. Today's way of working makes us very dependent on our laptops, and thus sitting. By using new ways of distributing information, we can also facilitate other forms of working. But for this to succeed, we need to join hands. What do you guys think?</p>	<p>To make the current situation was more tangible, we will first play a game. I have two name plates here, one with the IND and one with an employee. I will give you the employee's sign later, which means you are a random employee at the IND. I will get the other sign, which means I will pretend to be the rest of the organisation. I will then start throwing planes at you that you have to catch, while you stay seated. You will be expected to fold them all open and read the contents. We do this until all the planes are thrown. After this, you will be given a form with some questions to answer for reflection.</p> <p>Now we will turn the tables and play it again.</p> <p>This, in a nutshell, is how the average employee feels while working. Our podcast experiment has shown that this can also be done differently, but we need your help to do that. What do you say?</p>	<p>To make this clear, I would like to run the following with you. In a moment I will give you an A4 sheet with a piece of text on it. On the other side of the room is a pile of clothes. I will soon start a 3-minute timer. During those two minutes, you have to do two things: Read the whole text Have folded all the clothes</p> <p>To avoid rushing off, I will assess whether the clothes have been neatly folded, but also verbally test whether the text read in its entirety. Okay top. Now we will repeat the experiment, but there I will change 1 factor. Instead of the written text, you will now be given an audio version. Other than that, all factors remain the same and everything will be controlled. OK, what was the most noticeable difference between the two situations? Funny you mention it, because you're so not the only one. During our experiment, we also got this back constantly. By using podcasts, we give everyone the opportunity to absorb information in their own way, even in combination with another activity.</p>	<p>Let me take you back to about 20 weeks ago. We just came out of our meeting to approve this experiment with good cheer. So we got to work and immediately recruited people throughout the organisation, who would want this? So we ended up with a nice group of 89 victims, and as it turned out, they just pay attention, but all run into the same thing. What are these issues? Too many e-mails, sitting for too long, not enough time for other things. For instance, we spoke to Anneke, who has to answer her latest mails while having dinner with her children. And Barry, who can hardly walk his dog anymore because of all his mails. And finally Douwe, who is now seeing a therapist with back problems to do something about it. Is any of this recognisable? Because this is only a small part of the insights. Piles and piles of insights we picked up from problems, but also from solutions. We tested the podcast with everyone and how enthusiastic they were. More than 80% saw themselves using it, and almost the full 100% didn't understand why it wasn't there yet. I'm not going to bore you with all the figures now, as I can give them to you afterwards, but this I would like to give you; please do here.</p>
Interaction	During a short presentation, the expected benefits were highlighted with the use of crumpled post-its. They embodied the people that benefited from the innovation. For the specific benefits, name cards were used and were interchanged between benefit. The amount of post its were also grouped according to the benefit. The aim was to physically show the impact of the innovation.	After a brief introduction, customers were asked to play cap on cap off. A number of provocative questions were then asked that had to be recognisable to the customer. These had to be answered by putting on or taking off the cap. This was followed by a short conversation.	The client was asked to read a page of text without moving once. Every time the client moved, they had to start again with reading. The aim was to make them feel what it is like to be "trapped behind your laptop".	The client was asked to do normal work and the designer was impersonating the roll of an employee. While working, paper planes were thrown at the client, which were supposed to represent mails. On each paper plane was a recognisable or crazy message. After all the planes were thrown and read, a conversation was held about the situation and whether it was recognisable.	The customer was asked to read a piece of text and fold a pile of clothes within two minutes. Afterwards, the client had to do the same interaction, but then was allowed to listen to the text. In both scenarios, the client had to get as far as possible with both. Both scenarios were discussed to identify the added value of listening.	Using the principles of verbal mastery, a presentation was made. This was a verbal monologue but included questions towards the Client, anecdotes, hand gestures, and a personal appeal at the end.
Supplies	Post its and paper nameplates	A hat	Piece of text to read	Paper airplanes and laptop of the Client	Clothes and text with corresponding audio file	
						

E. Evaluation of principles

Embodying alternatives



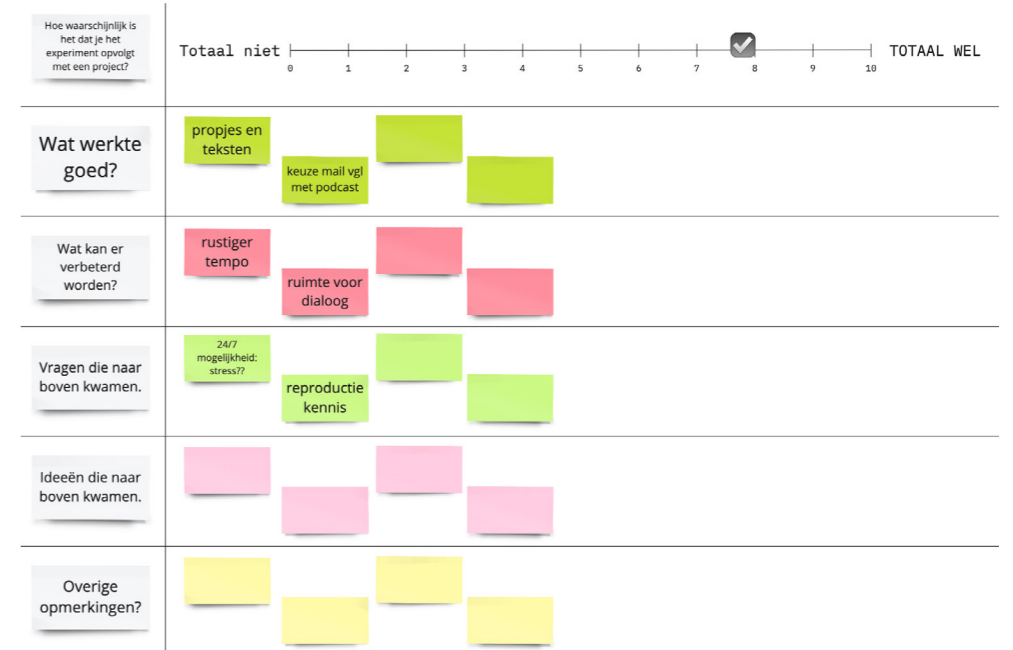
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Verbal mastery



2

Expected benefit



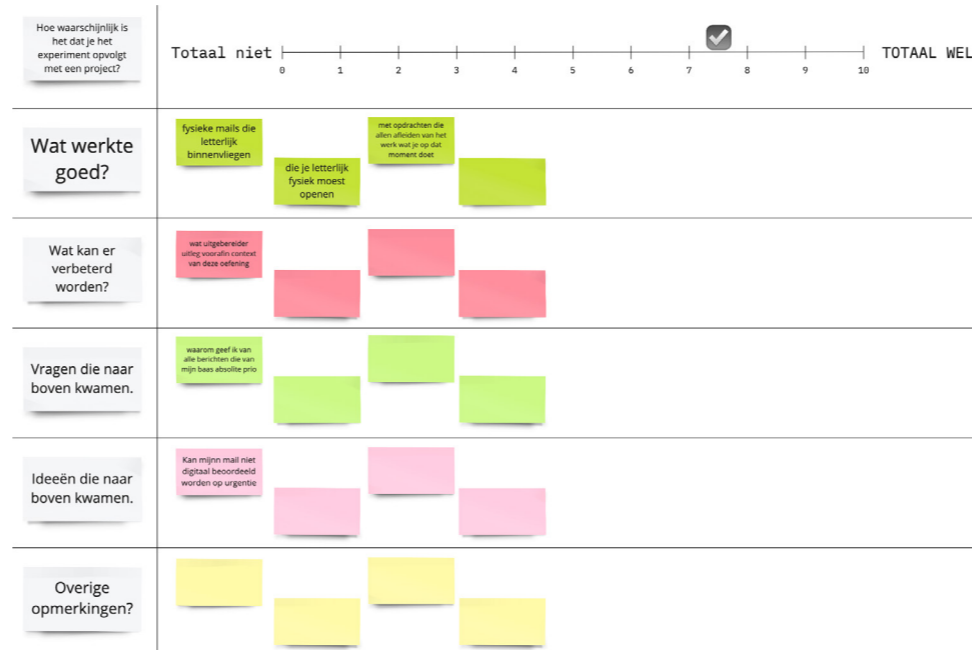
3

The compatibility



4

Perceiving multiples



5

Sensing surprise



6