DESIGN FOR our future

TU Delft

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: de Wringer
initials: MJ given name: Mark
student number: 4377680
street & no.:
zipcode & city:
country:
phone:
email:

Your master programme (only select the options that apply to you):

IDE master(s): ( ) IPD ( ) DfI (★) SPD
2nd non-IDE master:
individual programme: - - (give date of approval)
honours programme: ( ) Honours Programme Master
specialisation / annotation: ( ) Medisign
( ) Tech. in Sustainable Design
( ) Entrepeneurship

SUPERVISORY TEAM **

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

** chair: Erik Jan Hultink dept. / section: MCR
** mentor: Willemijn Brouwer dept. / section: MCR
2nd mentor: Confidential
organisation: Candy Inc
city: country:

comments (optional): There was no reaction from chairs or mentors from other departments, and even though Erik Jan and Willemijn are from the same dept. they both add unique perspectives and specialisations.

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.

APPROVAL PROJECT BRIEF

To be filled in by the chair of the supervisory team.

chair Erik Jan Hultink date - - 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

Of which, taking the conditional requirements into account, can be part of the exam programme _____ EC

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

YES all 1st year master courses passed

NO missing 1st year master courses are:

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

comments

name date - - signature

Initials & Name MJ de Wringer Student number 4377680

Title of Project Introducing modular products to the medium-end B2B foodstuffs market

Introducing modular products to the medium-end B2B foodstuffs market — 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 - - — - - 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, ...).

Candy Inc designs and builds custom process installations for the high-end international food industry.
Candy Inc is currently developing modular parts of food processing machines in-house. These parts can be made ahead of time and kept in store. In a project for high-end clients these modular parts could be used in the custom machines built for them, saving on costs and thus improving margins. But these modular parts can also save enough costs to approach the medium-end market while retaining a viable margin.

The current practice is building long relationships with large brands. When these brands do expand or build new factories the orders they ask from Candy Inc are substantial, however there are times when this doesn't happen or a competitor gets the order. A portfolio of configure-to-order products can smooth these bumps in operation uptime. To paraphrase from Aqlan et al. (2014) configure-to-order (CTO) products can be produced, tested and assembled based on a forecast plan. These components can be kept in stock until a customer order, then the components can assembled according to customer specifications. This provides the company a combination of flexibility in customization and the efficiency of mass production.
A portfolio of branded, configure-to-order, modular products can benefit Candy Inc by increasing competitiveness of their pricing, their reach in the market and the occupancy of their fabrication hall.

From the customer side this doesn't impact the current relationship high-end companies have with Candy Inc, as they will still request custom machines. But companies of medium size or large companies wanting to experiment on a budget can request machines within their price range from Candy Inc. Which will still have the high quality standard needed for the food industry.

For designers and engineers at Candy Inc this is a challenge because they are asked to create machines without knowing the exact type of product the customer would want to produce with it. These parts would need to be generalized and modular to fit the wishes of most clients alone or in combination with other parts. These machines need to be highly configurable for different mixes of ingredients and foodstuffs. When I start this project Candy Inc has already started developing these machines.

Then the marketing department will need to sell these process lines in a different way to different customers. These can sell to a larger amount of customers with shorter relationships. Candy Inc's international agents can be instructed to advertise these lines to smaller/more local brands.

Aqlan, F., Lam, S. S., & Ramakrishnan, S. (2014). An integrated simulation–optimization study for consolidating production lines in a configure-to-order production environment. International Journal of Production Economics, 148, 51–61. https://doi.org/10.1016/j.ijpe.2013.11.006

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introduction (continued): space for images

image / figure 1:

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.

A portfolio of branded, configure-to-order, modular products can benefit Candy Inc by increasing competitiveness of their pricing, their reach in the market and the occupancy of their fabrication hall. Candy Inc has the opportunity for development and testing of modular parts in-house, these parts can allow Candy Inc to reach more markets but they do need a strategic marketing plan.

To set up the strategic marketing plan for Candy Inc, the following questions will need to be answered:
What (new) customers does Candy Inc want to reach?
What do these (new) customers value?
What are the other options available to these customers (in terms of competition)?
What kind of relationship and service do these customers expect?
Through what channels should Candy Inc reach these customers?

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.

I intend to create a strategic marketing plan to introduce these new modular products. Research into the customers, context, competitor and company will illuminate a campaign for Candy Inc. The campaign will include a definition of their competition axis, brand DNA and positioning statement to underpin the created marketing material.

The solution I create will be a marketing strategy for a new product entering a new market. This will be created following the steps of the BPC course's Product Launch Campaign and the methods taught there.
This will result in:
A complete 4C analysis (Customer, Context, Competitor and Company) based on a combination of interviews and desk research. This provides a foundation of knowledge on all aspects necessary to design a market strategy.
Insights distilled from the 4C analysis, because interpreting the data I've gathered is just as important as the data itself.
Strategy and key message, including brand DNA, positioning statement, purpose and personality.
Finally I will create strategic marketing material and branding, this can be marketing material Candy Inc can send to their customers through specified channels and/or a Candy Inc brand image for the modular product series. This will be in addition to visualized representations of the analysis I have done to aid Candy Inc with moving through their competitive landscape or aids for sales to bridge connection to the customers and partners.

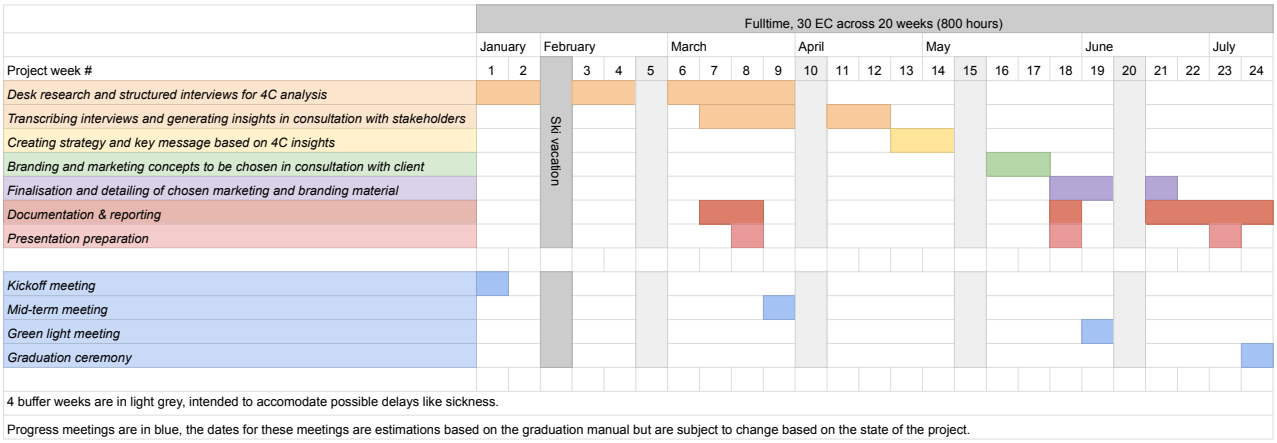
Initials & Name MJ de Wringer Student number 4377680

Title of Project Introducing modular products to the medium-end B2B foodstuffs market

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 - - - - end date



I will start by researching the 4C's Customer, Context, Competitor and Company. This will consist of structured interviews within the company but also with partners and agents, these will be transcribed and analysed. These interviews will be combined with desk research into the context of Candy Inc and also broader concepts like B2B marketing, shifts in customer base and the impacts of expanding a portfolio from pure custom with configure-to-order products. This phase of data gathering will take the most time of the project but it provides the foundation of knowledge for all the solutions I design afterwards. So it is important that it is expansive and representative of all 4C's.

From all this generated data I will need to derive insights, this will be a phase of interpretation and finding links. These interpretations will form the first hooks for potential strategies to latch on to. This will include charting Candy Inc with its competitors to get a feeling for the positioning in the high- and medium-end market.

Then I can define the brand DNA, positioning statement, purpose and personality of Candy Inc's products and brand. These will lead to a cohesive key message that needs to be exuded by the marketing material developed in the next step.
Concepts for marketing and branding will be designed and preferences will be chosen in collaboration with Candy Inc. These concepts will then be detailed in the final step of the method into material that Candy Inc can use for their venture into the medium-end market with their new Candy Inc brand modular products.

During the process I will be documenting my progress and making a report, for ordering my thoughts but also for Candy Inc to keep as reference for the developed material and future endeavors.

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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.

I want to become more comfortable with and master the methodology taught during the course Brand and Product Commercialization. I feel like this project in particular will be challenging because I will be applying the method to a B2B scenario. Of the courses I've had during my Master BPC is one of my favorites so I'm excited to be able to graduate in a similar direction and I want to use this opportunity to further grow my capabilities in this specialization.

I have next to no experience working at or for large companies, besides the limited time I've had during my education. So for me this will be a taster for the potential direction of my post-graduation ambitions. I am curious to learn about company culture, communication and networking while I work on this project.

This project will also be a proving ground for what I've learned at SVD (Strategic Value of Design). Because Candy Inc is not familiar with design methodology and especially strategic design it will be a test of what ways I can apply strategic design principles and what value I can add to companies like Candy Inc.

As for more general competencies this will only be the second project that I will do on my own during my education at IDE. Working on my own was hard during my Bachelor end project but I am excited to prove my growth over the last years with this project. Especially making and following a planning I've set out for myself was challenging. So I want to take this opportunity to devise a method that works for me and that I can stick to.

A final general competency I want to hone is reporting, I tend to overthink and write too little. So my ambition this time is to carefully log my activities and report well on the steps I take. This is in addition to making a graphically appealing report which befits an IDE graduate. The graphical design of my reports is something I've always found lacking and a project like this is the perfect opportunity to really take the time and create something that's both useful and nice to look at.

FINAL COMMENTS

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

In the final report Candy Inc will not be referred to directly, instead I will refer to the company as Candy Inc. Any person interviewed will also not be mentioned by name in the report and any insights gathered will come from the broader 'analysis of all interviews'.

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