# **Appendices**

Appendices A-F

Designing Interventions for Reciprocal Strategy Formulation and Execution

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# Appendix A - Studio Research

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## Appendix B - Interview Guide

## Research Question:

How can small to midsize industrial design practices address strategic challenges?

#### Sub Questions:

How do industrial design offices transform to address strategic challenges? How do the different fields (industrial design and strategic design) influence each other?

## Introduction

First of all, I would like to thank you for taking time to have this interview. My name is Valentin Bufler, and currently I am conducting research for my thesis in Strategic Product Design. The purpose of this interview is to gain some insights into how small to midsize industrial design offices address strategic challenges.

The industrial design offices I am interested in for this study are small to midsize practices that manage to stay successful through the changing demands clients have of industrial design offices. I believe that your experience and insights can help me find some answers.

Your responses will be kept anonymous and confidential and will be only used in this study. At any time during this interview you can withdraw if you choose to do so. There are no wrong or right answers, since I am interested in your opinions, experiences and insights. This interview will last max. 60 min. During our interview you can interrupt me at any time. In order to use your responses better, I would like to record this interview, if that is ok with you? I will only use the recordings for transcribing this interview; after that the recording will be erased.

Before we start, did you have any questions regarding the consent form? (If I haven't gotten it yet, now is the time to get it)

- To start things off, could you tell me a bit about yourself, your background and what your practice does?
- How many people work in your practice?
- Is it an independent studio/office/etc.?
- When was it founded?
- How would you position your practice?
- What services does your studio offer?
  - What would you say is your target client? [prompts: SMEs, NGOs, larger companies, start ups, multinationals, local/international, certain sectors]

## Theme 1 PRACTICE

- Could you tell me about a strategic challenge a client had for you and how you tackled it? [prompts: methods/tools, approaches]
  - In your view, what makes this challenge strategic?

- [Alternative: Could you tell me about how you and your practice generally approach a strategic challenge?]
- How did that challenge you as an industrial design practice? [prompts: triggers, positioning]
  - What were your learnings/takeaways from such strategic challenges?

## Theme 2 TRANSFORMATION

- What capabilities did you have to build within the practice to be able to address strategic challenges?
  - Could you elaborate on how you build those capabilities?
- Did your organization have to change structurally in order to meet these new demands and if so how? [prompts: business model, revenue model, restructuring teams, setting up an account part of the business, etc.]

## Theme 3 INFLUENCE

- How does your industrial design background influence how you tackle these challenges? [prompts: methods/tools, approaches, mindset]
  - Could you elaborate on how you use your industrial design expertise in these strategic projects?
- How does working on these strategic challenges influence your industrial design practice?
  - Could you elaborate on how the relationship with your clients has changed?
     [prompts: project based vs account, long term, collaboration, etc]

## Wrapping up

- Before we come to the end of this interview I wanted to ask if there are any insights/remarks you wanted to share about this topic that were not addressed with these questions?
- Do you have any questions for me?

## Snowball sampling:

 Do you have a client that you think could be interested in participating in this study, to provide some insights in the clients perspective?

## Appendix C - Interview Transcripts

## Interview 1

#### Transkript

In1

... agency. So we work for a lot of different markets and it doesn't matter because yeah, we think that the design thinking and the concept thinking and how we work is applicable to a lot of different markets. But yes of course usually product design. So not just making the nice shape, but also developing the right functionalities and to have discussions about this with our clients. It depends on how well we know the clients. Sometimes it's new clients and you just make the first design. They just basically ask us to make a new exterior of a product. And the better we know them, the more we think with them and the better we know their market as well and we help them to strategize for their market. We're based in Amersfort.

What else? I think that's about. A summary of what.

#### Sprecher 2

So your clients are mainly local companies or also international?

#### In1

They are from everywhere. All around the world as well, but usually they do have something in the Netherlands that has to do with R&D. So one of the big clients is SKF. They make ball bearings, a lot of different bearings. They're the world leader on ball bearings. So probably your bicycle or your car or whatever it has SKF bearings and what we do for them is we design the maintenance products. So it's usually handheld devices that help people in big factories to maintain the ball bearings. Yeah, there's like a stethoscope, stroboscopes, shaft alignment, belt alignment, those kinds of tools. They are Swedish, but they have R&D developments in France and in the Netherlands. So that's why we have good contact with them.

So basically they come from everywhere, also in the Netherlands, we drive to Groningen and Friesland, Noord Holland or so. Everywhere. So it goes.

That's not a limitation, but you do notice that, yeah, usually companies try to find something closer because yeah, that feels more familiar or something.

## Sprecher 2

And I guess that also means that it's usually smaller to maybe mid sized companies but not multinationals.

## In1

Yeah, it depends. Multinationals are more used to having a little bit of traffic or that you have to drive to discuss things. But yeah, the smaller companies usually try to find something that's closer by, but it also depends on the market. You know, we have some companies, some agricultural companies and they are more used to working with other companies that are close by and they like it very much and other ones, although they are still also international. So that... That doesn't mean that they are not that internationally oriented or something but. I think it's kind of a cultural thing.

## Sprecher 2

Yeah, probably as well. And would you say that it's mainly the agricultural sector, then, that you focus on or like in general technical sectors or are you super open?

#### In1

We always say we have 7 sectors and I don't know them all by heart because we also go outside of these sectors... Yeah, but it's medical, it's agricultural, it's coffee machines ... Let me think... What else are we doing? ... Just looking around... Industrial consumer. What else? Yeah, so we don't limit it to certain markets.

#### Sprecher 2

I mean, often it's also that clients see work that you did already and therefore they come to you and then obviously some work will be similar.

#### In1

Yeah, that's why we do categorize them on our website as well. So we have our website, you can filter what kind of projects we've done. And we believe that people get more trust in your company if they see that you've done other things in the same market. So the categories don't limit what we do or what we don't do but they do give more trust towards people in that same industry, so that they think "they have already done a lot of agricultural design, so probably they know what we need". So that's more marketing smartness, so to say.

## Sprecher 2

Could you tell me about a strategic challenge that a client had for you in the past?

#### In1

Strategic challenge... Yeah, it's difficult because it's not usual that they come to us and they ask us to do strategic development or something. It's usually something that developed during a project or once we get to know them. And then we just think along with them and then their process starts and then "let's do a workshop about it" and then it, yeah, it becomes bigger and bigger. And then in the end, we're discussing and we're basically advising on what we would do and we are trying to organize for them to get all their thoughts straight, you know and that they can make wise decisions.

#### Sprecher 2

That's not necessarily something that the client comes to you with, but more something that comes out of a project or of a long term relationship with the client?

#### In1

Yeah, usually, that happens and we do have some clients that we have worked with for like 10 years or longer and they ask us, like, "OK, if it was your company, what's next, what should ... what would you do?". And then we do a little bit more research and we also go into depth where we do market research and look at all the competitors and try to find new ways to beat the competition, you know? But that's maybe 5% of our assignments or something like this.

## Sprecher 2

And would you say that increased overtime that more and more clients ask you also for these types of services?

#### Tn1

Yeah, I think so, yeah.

#### Sprecher 2

They probably focus then on kind of a whole package or is it then also just strategy?

#### 00:06:59 In1

So we already do like the whole project and products for them. And then yeah, we just think along with them, that's basically it. And it evolves towards strategic as well.

#### 00:07:13 Sprecher 2

And what would you say makes these challenges more strategic than a general project brief that you might question?

#### 00:07:25 In1

Can you rephrase that? I don't really. I don't have a direct answer.

#### 00:07:27 Sprecher 2

I guess usually you get a pretty clear brief for a project and maybe yeah. And maybe there you start asking to question that brief, which can be I guess seen already as strategic involvement. But I guess I'm wondering what makes in your eyes a challenge strategic and what are the kinds of parameters that are different from a normal project that you would take as an industrial design office?

#### 00:07:58 In1

Yeah, I think if they really make it, I think an assignment becomes strategic. If they really ask us to do work in this. But in a lot of cases when we basically get the question of making a product design for us, we are also already strategically involved, but it's more in the process before the brief gets done you know. So at the moment in which this project is kind of getting in shape and you're trying to define the scope of the project. That's the moment that we're already discussing with them: "OK, maybe you should go this direction" or maybe you can go in that direction or you want to to find concepts for all those directions and we always try to define the 'Success Factors' as well. That's how we call them. So we're trying to know what we need to do to make a good product and a good project for the customer. We'll try to do this beforehand, so we already do a little bit of strategy with them and we say OK, so cost price is really important, yes or no? The throughput time? You know, you want to make a certain fair for instance where you want to release the project, but you're also talking about what is in the design important and user experience or the user interface all those kind of things we are trying to define on beforehand and then yeah, we can kind of define 'Success Factors' and they can go everywhere. Now I'm talking about a lot of really product design 'Success Factors', but they could go all over the place. Yeah, that's also a little bit of strategy, but we don't really call that strategy projects, we call it strategy projects when they ask us: Can you strategize for us what to do?

## 00:10:05 Sprecher 2

So when it's becoming more than, let's say, a product strategy, but more the overall strategy of a company?

## 00:10:13 In1

Yeah, yeah, portfolio strategy and also like, yeah, what kind of R&D do you need? To do with your company because in a lot of cases we do the exterior and the user experience of a product and the interior is something... So all the mechanical smartness is usually the intellectual property of the company that we work for.

So if we're talking about SKF this stroboscope: So it's a light which flashes really fast and flashes exactly at the same rate as the ball bearings where the machine is turning. So visually it looks like it's standing still. So the smartness of having a stroboscope is something that's the intellectual property of

SKF. And the casing is something that we designed so that the user interface works really well and that you can hold this really nicely and those kind of things. But over time, we do think with them about, OK, so if you are going to make a bigger stroboscope or a smaller stroboscope to cover your whole bearing portfolio, etc.

That's something that we try to think about with them as well, yeah.

#### 00:11:29 Sprecher 2

And do you have specific approaches or methods that you use for these strategic challenges?

In1

No.

#### Sprecher 2

It's just depending on whatever the ...?

#### 00:11:36 In1

It's always different, yeah.

## 00:11:39 Sprecher 2

And how would you say that that challenged you as an industrial design office? What were kind of the challenges you encountered? Because I guess it's not the typical work that you do and now you have to grow in a way.

## 00:12:08 In1

I don't really see it as challenging. I think it's just really interesting to grow with your clients and usually people get a lot of energy out of it.

Yeah, to be able to think along on this because you know if you just get a design brief and you have to do this, then it's more like, OK, just doing what you already thought of. So it's really nice. I think everybody really likes it. But it does come with some... It takes a little bit of time before you can develop this strategy, so you're in like, yeah, you're in a lot of brainstorms. And sometimes it looks like you're not getting anywhere. Uhm, you're just trying to research and that can be a slow process or something and it's important to make sure that you have time for it to get your mind straight. And if you're doing a lot of projects... because we're always working on two or three projects at the same time, everyone is. So with the whole company we have 30 projects or something running at the same time. So it's sometimes difficult to switch towards "OK now sit down" and we have to make space in our minds to find what is the connection between different things and what could be an interesting strategy and try to to challenge that again, so to to take the step down and make space for that. That's something that might and might be challenging sometimes.

#### 00:13:53 Sprecher 2

And did you have to grow certain capabilities to be able to do these things?

#### 00:13:59 In1

No, I think it's more of an attitude thing. So the people that work here are really ambitious and they are really already looking and asking about these kinds of things... Yeah, nobody really likes to just be an executor here.

#### 00:14:19 Sprecher 2

Yeah, you can see that. And on more of an organizational side, did that mean that you had to restructure maybe how you approach client projects? That it's maybe a different kind of business model or was that also very much in line with what you already did?

#### 00:14:39 In1

Well, we are trying some things. So a few years ago, we did strategic research which was just strategic research. So not so much about the product design. Our added value there was that we can really make quick visualizations of ideas. So we basically organized for that company brainstorms and then they came up with a lot of ideas and we could just sketch on site their ideas and they could say "yes, I want this" or "no, I want that or that". That really helped them organize and we are trying actually right now to also do this for different companies, we call this the scope design lab. There's also a different page on our website about this.

UM, and that's something that's a little bit organizational. Yeah, it's different. So we're trying to basically sell these kinds of projects without what all the other projects normally have in front of it before we do these kinds of things.

Does it make sense?

00:15:53 Sprecher 2 Yeah, I think so.

#### 00:15:56 In1

So we did do a little bit of organizational changes, but I believe that we have the right people to do these kinds of projects, so we don't really need to change, we don't need to hire different people or something. Everybody here is a design thinker. So yeah...

#### 00:16:16 Sprecher 2

And would you say it changed the way that you maybe had before more project based work and now you have more long-term relationships with clients or was that also something that?

#### 00:16:26 In1

No, that didn't really change. We do have long term relations and we do have new clients and I think it's a healthy mix right now. Usually I don't have a lot of clients that stop our relations, so that's also a good sign, I think. It's just sometimes they don't have as many questions for new products. You know what we do is designing new products and sometimes one product is already enough for a whole company, so then you do the work, and then they don't have any new questions, so you don't develop the relationship you would like. But we're aiming at long term relations and we're aiming at companies that do have this repetition on new projects, so they don't just have one product, but they have more products coming in over the coming years. So we always try to develop together with our clients. So if our clients are successful, we are as well, because then we can grow.

#### 00:17:36 Sprecher 2

Yeah, and do the clients have, I guess generally an internal design capability or is that always completely outsourced to you?

## 00:17:44 In1

Usually no. Yeah, usually our clients have mechanical engineering for instance or marketing. And then yeah, they hire us to do the design work.

00:17:56 Sprecher 2

All right. How would you say that your industrial design background influences the way you address these strategic challenges? Maybe also in comparison to other strategic work that maybe more traditional business consultants do? DDid you maybe get feedback from clients about that?

#### 00:18:19 In1

Yeah, I think what our power is is what I just said a few few sentences back: it is that we can really visualize the ideas directly, and I think in a lot of more normal business kind of consultants, I think they are more focused on processes and only on processes and not so much on the products and how to improve the products and to quickly visualize the ideas that you have.

So I think they are more process oriented than we are. We also are process oriented, so we also help with processes but the power is I think in also visualizing stuff.

#### 00:19:13 Sprecher 2

Yeah, making things tangible.

Yeah, also prototyping or just visualization?

#### 00:19:19 In1

Also prototyping, but it's visualizing in sketches for products, but also in visualizing processes. So if I'm talking about one of these projects, we have like a ton of big, big, big posters. We have a plotter, it prints at 90 centimeters high and we can make prints of 10 meters. And then we have the whole process on the paper and that just makes it really insightful for the company bosses basically to see so that we can understand that there is an issue. Or we can maybe find links to different places and that also helps to organize thoughts. Yeah, so it's the processes, it's for the products also prototyping, but that depends how far they wanna go and how much effort they wanna put in it.

#### 00:20:15 Sprecher 2

I guess also the implementation expertise that designers have is probably helpful, because I think a lot of the time in strategic work, the implementation kind of falls short. Because consultants may come in and just give recommendations and then they leave again, they don't really care about that. And maybe designers also have there some kind of leg up.

#### 00:20:40 In1

Yeah, I think you're right. I think it depends on the question. If it's a really product oriented or portfolio oriented question, yes. But I'm also thinking about when we've worked for Vodafone Ziggo. We're still working for them actually, but we helped them to think about how to improve their service. So if you get new stuff to attach to your TV to have TV and Internet at home you always get a lot of stuff and you just basically have to figure out through all the manuals what's necessary for your house, because every house has different connections. And we try to help them in that process and to minimize the amount of stuff that needs to be sent by knowing beforehand when you order with a really simple app, what kind of stuff you need. So you only get sent what you need and not extra screws and extra stuff. Uhm, and I think that's something we also prototype. So it's not like a physical product, it's more like a user interface for an app which we prototyped and tested and also knew that it was possible. Because it was also with image recognition, so you could make a picture of your connection at home and then it would say, oh you have this and this connection and does it look like this picture? Is that correct? OK, then you need this in this box and it will get sent to you. So that's something that we tried and prototyped and tested. And then proved basically that this is something that would really help them and in the end it would of course save a lot of money for them because they don't have to send as much technical staff to help fix the connection.

So that's definitely something that we do because we also do user interface design where we could really make it until the end. We didn't really develop the app, but we did develop the user experience and how it should work. So yes, I'm totally agreeing with your statement.

#### 00:22:52 Sprecher 2

OK.

And would you say that working in these strategic challenges also influences the way you do the more industrial design part of projects?

#### 00:23:06 In1

Yes and no, the strategic questions always arise and we always discuss them also during all the industrial design projects, yeah.

#### 00:23:19 Sprecher 2

And I guess it also depends on the client how open they are to maybe open up a little bit more and all that.

#### 00:23:23 In1

Yeah it does. Yeah, we will always try to level with them so that the project leaders on our side are on the same level as the client. So say the ones that give the assignment to us and we're always trying to make it a discussion as well, so if we get the design brief and we're working on it, and while we're working on it, we think maybe it's better to do it like this. So we try to discuss if we should change the design brief towards that direction. You could say that that's strategy as well. But I also think it's just in industrial design engineering that's just part of it, yeah.

#### 00:24:11 Sprecher 2

And the client relationship ... is it closer now or do you need to have more interaction with the clients during a project?

#### 00:24:24 In1

That doesn't change, yeah.

## 00:24:27 Sprecher 2

It's the same? ... OK. Very interesting to see a bit more into that because I also had experiences that a lot of industrial design offices are a bit guarded, especially with the strategic parts, because maybe clients expect more of a, I guess, secrecy around it. Especially concerning strategies. Often they are something they were very secretive about. Yeah, it's interesting to see the side of people involved in that process.

## 00:25:02 In1

I think it's about opening up as well and usually we only work for one client in a certain market. So if we are working for, let's say, a coffee machine maker which makes coffee machines for office industries, then we don't make coffee machines for other clients in the same market, so that also guards that we cannot share any information with other people. We cannot use the information that we talk about together in any other project and that I think also helps in making a trusted place or something to talk about things. And usually we are talking a lot to the bosses, to the CEO's and the CTO's of companies. So they really like to talk about high level strategies and they really like to discuss this because they don't always have a lot of people in their company that are able to do this. So then they also do it with us. So that also makes the opportunity to talk about this. And now it goes both

ways, so if you tell a little bit more about your own strategies or ideas that also helps them to think about it.

#### 00:26:42 Sprecher 2

Are they also interested in implementing design or design thinking more in their own companies? Is there an openness to that?

## 00:26:49 In1

Yeah, yeah. And they would like to, but they don't always know how to.

#### 00:26:55 Sprecher 2

I can imagine... Would you also help them build those capabilities?

#### 00:26:58 In1

I don't think we would. It doesn't happen that often that they are trying to start up their own design department or something, usually because we do good work and they have success with it, they think, OK, we go back again to them. So it doesn't happen that much... I think it actually never happened to me, at least that a company that I worked with started their own design part. Yeah, they do sometimes think ohh shit, design is really important. So then they hire somebody with a design background to, for instance, be lead designer. But if they have like 10 different product ranges, they still need a team to make it. And it's this design lead who is then more about making the right design brief, thinking about the strategy and they always still talk to us to have like an iInspiring partner on how to do it.

#### **00:28:11 Sprecher 2**

OK, I'm coming now kind of to the end of my questions, but I was wondering if you had any points that you would like to make that I maybe didn't touch with my questions.

## 00:28:23 In1

UM... Not really, actually, no.

#### 00:28:30 Sprecher 2

Yeah, maybe because you talked about interns earlier: Do you think that there's also a change maybe in the way designers are educated? That they have no capabilities in strategy in general.

## 00:28:45 In1

No, I don't think so. I think strategy is something that you like or don't like as a person. And I don't feel like you need certain skill sets or something to do it. You do prove a little bit that you can talk about these kinds of things by doing MOPD or strategy product design master. But I also think that different designers are interested in this also. Are capable of doing so, but it usually depends a little bit on also the AMBITIOUSNESS or the way you are, the way you think. If you're always looking to make something better, no matter what it is, then you already think about strategy.

## 00:29:37 Sprecher 2

Yeah, I agree. I think as soon as you start to question the brief and to redefine the problem you're already going into this direction.

#### 00:29:48 In1

So I'm actually wondering if it's a good idea to have these tracks that are specified on management of product development or on strategic product development, or if you could better try to improve more

your skills, your "hart" skills which you need to be a good designer and also have the interest on the side for this strategy part and then you'll get there anyway, so it's interesting if that would be actually necessary.

#### 00:30:18 Sprecher 2

Yeah, yeah, the TU Delft is right now redesigning their master program and I am not involved in that so don't know much about that, but it's definitely a question now, after I think they're around 10, no a little bit more than that, 15 years maybe of this master program, what they learned and how they're going to change it.

Because they just recently changed their bachelor's education much more, I guess a bit away from more traditional industrial design engineering more to service design as well and I guess complexity and systems are much more embedded already. But yeah, it's interesting if they're going to keep this strict separation or if they will combine them a bit more again.

## 00:31:09 In1

And if I look back at my own education, I always think it's a pity that I didn't do the applied sciences before I did the university because I did really miss the real thing, how do you really do it? You know? It's interesting to know injection molding and it's really on a basic level in university, just theory on how it works, but you've never done it. So if you're done and you start working, you basically know nothing. You know? You don't know any thumb rules. You don't know any... You don't have any experience in things that can go wrong. How to communicate with your injection molder. Yeah, that is usually how people learn it. But yeah, that's always what I basically missed in my university. So theoretical.

#### 00:32:06 Sprecher 2

Yeah, that's true. Yeah, I think what is kind of helpful from this master is understanding much more the business side of things. And I guess being able to better communicate with a lot of people on that side... I notice with designers we are very much in our own bubble and on our expertise. And then sometimes communication is a problem. But I guess that's also something that one could learn on their own or through work.

## 00:32:40 In1

And on the other hand, there are whole schools that just go about business. So it's also, you can learn a lot about businesses by knowing what kind of organization styles there are so you could more easily talk about this with your clients. Yeah, but up till now I'm not missing it.

Actually usually the companies or the clients, they want to talk about it and they tell you everything about it so then you just need to listen really carefully and then you understand as well. So yeah, it just depends on where your interests are. If you find that interesting, you will learn it.

## 00:33:27 Sprecher 2

That's true.

Did you ever have an experience with somebody from a more business or management background who learned 'design thinking' in a course and claimed to have expertise?

#### 00:33:41 In1

No, I haven't met somebody like that, no.

#### 00:33:46 Sprecher 2

Because like through my desk research now, I noticed that increasingly business schools also teach design thinking. And then obviously it's a different, I guess, level of expertise in design.

Yet they're very much mushed together into well, 'design thinking'. And I wonder if there are sometimes clashes from more of a business world and a design world talking about the same thing?

#### 00:34:13 In1

I can imagine that a lot. You know there are a lot of trend words, of course.

## 00:34:18 Sprecher 2

Definitely, yeah.

#### 00:34:19 In1

So design thinking, what is exactly design thinking? And I do think that if you've really done a design education, you've had different experiences, different styles of design thinking so, yeah, I think it's more than... I don't think you could cover it in one course. You can maybe cover one way of design thinking or something or one method. But I think it, yeah, you can do more if you have a design background. To me it feels easier too. And get to know about how businesses work, because there's also a lot of people that start making a business. You know, you don't really need the school for it. But it depends, I think. Also if you get into higher and bigger businesses, then it's important to know all the rules and all the things you could do.

## 00:35:18 Sprecher 2

Yeah, Speaking of methods, would you say that you rely a lot on methods in your practice, or is also a lot of intuition and experience?

## 00:35:30 In1

We do have a methodology, so basically a waterfall method which we can use. We usually use it to explain a little bit on what kind of phases you have, what kind of milestones we need to think about, and to talk about throughput times for things, and also to try to to make the scope for the projects a little bit more clear. But one big remark always is it's so dependent on iterations. So what you learn overtime during the project... Yeah, it may happen that you want to redo your whole thinking or you really wanna redo your whole concept phase.

So we do have some methods, but it's always different. It's never the same, exactly. It also depends on where the weight of the question lies.

#### 00:36:29 Sprecher 2

Did you have any questions for me?

I think you were the one who asked me about how many people responded, right?

Yeah, it's been slow, but I think it's also because a lot of fairs are coming up, like for example, Milan is coming up with the big furniture fair end of April and I think a lot of studios are very busy with that right now.

Uhm, but I do have, especially in the Netherlands, I guess some responses I feel there is a bit more of an understanding of this field of strategy and strategic design. I personally am German and I am having a hard time finding studios in Germany for example that do strategy or strategic services. So yeah, I think the Netherlands is there definitely a bit further ahead.

## 00:37:23 In1

OK, I can imagine that there is a lot in Germany and there are also even some Dutch studios who have offices in Germany, of course.

#### 00:37:36 Sprecher 2

Yeah, I have the feeling that there is much more preference for this clear separation between "there's a design studio and this is a strategy consultancy" and like I know what I'm going to get if I hire those people.

00:37:48 In1

Yeah, yeah, I can imagine.

OK, well I hope for you that you will get a lot of responses.

00:37:58 Sprecher 2

Yeah, I'm still in contact with some and I have a couple more interviews lined up.

00:38:04 In1

Yeah, because he needs some kind of minimum.

00:38:07 Sprecher 2

Exactly, yeah.

00:38:08 In1

End values, let's say to make anything out of it, because if you just have to rely on my interview.

00:38:16 Sprecher 2

I think right now I have planned about 6 interviews.

00:38:20 In1

OK. Yeah.

00:38:20 Sprecher 2

My goal is 10.

That would be nice.

00:38:23 In1

Yeah, OK, cool.

All right.

00:38:27 Sprecher 2

Thank you so much for your time.

And for your answers.

00:38:30 In1

No problem.

Good luck with your whole study.

00:38:33 Sprecher 2

Thank you.

00:38:34 In1

And if you have any other questions or you want to come back to something, please let me know.

00:38:39 Sprecher 2

All right.

Yeah. Thanks so much.

Have a great day, yeah.

00:38:43 In1

Oh, by the way, you did mention something in your email about the option of getting the results. I am very interested, so if you could please share your report or something at the end of your study then I would really like that.

00:38:58 Sprecher 2

Yeah, I will do that.

00:39:00 In1

And when and when do you plan to be done with it?

Because how far along are you?

00:39:04 Sprecher 2

I had just yesterday my midterm so the end is planned for the end of June, beginning of July.

00:39:11 In1

OK, OK, cool.

Alright yeah.

So please share the report if that's possible.

00:39:18 Sprecher 2

I will do that, yeah, definitely.

00:39:19 In1

Really nice.

00:39:22 Sprecher 2

Definitely. Thanks so much.

00:39:23 In1

OK. Thank you and...

00:39:24 Sprecher 2

And have a great day.

00:39:25 In1

...Good luck. Bye bye.

## Interview 2

#### 0:0:0.0 In2

I... I like it, but then I want to have a say in it.

Uh, so if you quote me in your report I like it more that I'm quoted and my name is [next] to it, then that it is an anonymous kind of quote from ... [and] nobody knows who he is or she.

So let me know later when you wrap everything up and you kind of write your final thesis or you report and you want to kind of use me or use some things that I've said in this interview I would rather love to be guoted.

## 0:0:48.48 Valentin Bufler

OK. And then I'll reach out to you with the quote so you can...

#### 0:0:51.460 In2

Yes, that would be great. I've one question before we start. You look a little bit older than the avarage student, so, what happened?

#### 0:1:1.150 Valentin Bufler

Yeah. Yeah, I'm 30. I started studying in my early 20s, first architecture for a year in Zurich. Umm, but then I noticed that it's not the right path. So I took a a course where you prepare a portfolio. For design or art studies and I use that time to kind of contemplate, if I want to stay in the creative fields or if it's if the problem was architecture basically, or if it's in general creative fields. And then I decided I want to stay in this area. But I noticed that product designer industrial design is much more applicable to what I want to do.

## 0:1:47.360 In2

OK.

## 0:1:48.150 Valentin Bufler

And so I studied that in Berlin at the University of the Arts.

It was called product and process design, also did an exchange and then because of COVID things got a bit delayed and.

Yeah, and now I'm wrapping up here.

Yeah.

#### 0:2:4.460 In2

Nice. Thanks.

#### 0:2:6.650 Valentin Bufler

Yeah, no worries.

Did you have any questions about the consent form?

## 0:2:11.490 In2

No.

## 0:2:12.710 Valentin Bufler

OK. Because that would I think you didn't send me that yet. If I see that correctly. Yeah.

#### 0:2:16.440 In2

No. So you know these forms, they do not work. So in the PDF, if you want to... I'm not gonna put a lot of effort into it. Sorry it's like...

0:2:25.450 Valentin Bufler OK, yeah, no worries.

#### 0:2:27.320 In2

... It's wasted energy to make that document.

#### 0:2:31.10 Valentin Bufler

Alright. And then to start things off, could you tell me a little bit about yourself, your background and your practice?

0:2:38.360 In2

OK.

So where do you want me to start? with my...

#### 0:2:44.690 Valentin Bufler

I guess especially with your practice, it's interesting for me to hear the starting points because to my understanding it's now very much rooted in strategic design or more complex strategic problems. However, in the beginning you did work a lot more on products and more traditional industrial design.

#### 0:3:3.990 In2

Yeah.

Yeah. So I think ... So maybe I mentioned that I'm trained originally as a robotics engineer from mechanical engineering. So I come from the hard mode, the hard kind of engineering school. Maybe it's good to say because I ...

Maybe you think there's not any relationship between strategic design and robotics engineering, but what I think is very interesting is in robotics engineering, where you really kind of...

When you really have to make stuff that doesn't exist yet, you constantly have to go through barriers so it's impossible to grab modules from the shelves that already exist, put it together and make a machine. That's not working. So you have to really understand the physics or the nature of how physics work and based on how physics work you can make a robot. And you constantly reinvent your understanding in this relationship between you as a designer, in this case a mechanical engineer, and what's possible within that realm of nature.

And that is, I think, rather the same as strategic design to be honest.

So, strategic design is not about plug and play. You constantly have to reinvent everything to make something that is of value for another. So in that way they are a little bit the same.

Going back to your question where I came from: so, I started this company in 1992. So that's a long time ago. And I think what's really interesting is it's because of the research I was doing at Delft University. But industrial design engineering, looking at design methodology. So by understanding design in a different way, because of doing the research, I found out as well during my more professional career that the role you could have as a designer was completely different from how I was taught the role of designers should look like.

So, I think what's really interesting is: my whole career is like...

I think it has developed in the way it developed because of doing research, understanding that there's so much more possible than we thought beforehand and literally ... being a little bit naive, like trying what's possible.

So I think my career ... So when I look back to my own career it is a completely other path as creating strategies for organizations I work for. Because that's more of process you develop and you take a conscious stance in information. My own practice is more the outcome of a walk through the field of design and I never knew where it would end. I still don't know where it ends, to be honest. So it's more of an explorative kind of history. That's what I would like to call it.

And I think... So when you say strategy making... I think that's exactly where everything goes wrong: that people say you are a designer that does strategy making or you're a designer that makes furniture or ... that's exactly where things go wrong.

Uh, putting...

## 0:7:7.180 Valentin Bufler Just categorizing.

#### 0:7:8.610 In2

Yeah, exactly. Because non-professionals want to understand what you do you give yourself a name or a name tag and therefore you limit your possibilities yourself by doing so. So I always refused to adapt to a layman kind of outside world and I think we as designers should do that more often to be honest.

## 0:7:47.71 Valentin Bufler Yeah.

## 0:7:49.880 In2

And I like how you said it in the beginning. So how do we as an organization adapt to changes in relation to the organizations we work together with, but I really liked how you corrected yourself: Those organizations are really traditional, so we adapt to a changing society. That's what we do.

## 0:8:13.560 Valentin Bufler Yeah.

#### 0:8:14.160 In2

And we do not adapt to those organizations because they are slow, traditional... So there are not many front runners, I think, when you talk about organizations. I I don't know any, I don't.

## 0:8:33.300 Valentin Bufler

Umm.

You mean with private organizations or also public organizations?

## 0:8:37.880 In2

Any organization, yeah.

## 0:8:39.510 Valentin Bufler

OK.

## 0:8:40.150 In2

So as Reframe Studio, we work for all types of organizations, so public ones, private ones, NGOs, we don't care. So it's like a yeah.

#### 0:8:51.350 Valentin Bufler

Is there any difference in how you approach a project depending on what kind of organization it is?

#### 0:8:57.460 In2

No... No, because in the end we defend society against those organizations. So sometimes I make a joke: I say we defend society from the organizations we work for. And that's a bit of a joke, but there's a truth in it as well. So organizations are really goal oriented, or they became very goal oriented and often those goals are a little bit like...

There are two... There are simplified design assignments... So when you in the end come up with something that kind of makes sense, in relation to that simplified assignment, it doesn't mean anything for society. So I feel a lot of organizations, they live kind of inside of their own reality where they simplify the world. And in simplifying the world it can be very successful, also in relationship to communication inside of the organization itself and everybody feels comfortable. But in the end society cannot benefit from the organization and that's exactly what you see now when you see the power play of society. You see that organizations try to kind of step on top of society because they know if they are in control they can in a way "manipulate" what society thinks they are in need of. So I think it's very important that we say no, we defend society. And whatever organization...

Every organization has a relationship with society, so that's kind of the generic proposition we have: we make organizations understand, with what kind of society they have to create a relationship with.

#### 0:11:20.480 Valentin Bufler

Yeah.

And being that kind of simplified version, does it also mean there is a kind of a fear of complexity and of nuance I guess that you notice?

#### 0:11:34.100 In2

Again, can you ask me again? Yeah.

#### 0:11:36.930 Valentin Bufler

Yeah, you just said that these organizations simplify a lot of things in order for communication. And I was wondering if there's also an inherent fear of complexity.

Because I noticed, for example, that a lot of more traditional design briefs are very much reduced to one simple topic. But especially in strategic design, we notice how much systems thinking is also now coming in and the complexities of that.

#### 0:12:2.610 In2

Yeah, but I'm not impressed by those. So. So what Strategic design is doing in the field of system thinking... So they kind of use "ill defined problems", "ill defined structures". So that's where they all start from. And then I think, OK, people who say that things are ill defined, don't understand that it's not ill defined. It's just reality.

So "ill defined". I think people who use words like that are the people who shouldn't work on these kinds of issues. Because they don't understand that that is not at all the case, because it is defined, but it is very complex. You have to dive into it and you have to accept that in creating outcomes there's a big chance that the organization you do it together with at first they don't understand shit of what you brought to the table. So if you defend society, you often create a relationship with the organizations you work together with that is uncomfortable in principle, and I think a lot of strategic design is based on the idea of bringing comfort. Of being understood, of simplifying, of *fun*. And there's a lot of tools that bring *fun* in creating a strategy. I hate that because I think society in the end is the victim of it.

So I do think there's really good people out there, but I also do think that there's a lot of bullshit being kind of practiced and I think we ourselves also as a university are partly kind of responsible for that bullshit.

#### 0:14:5.650 Valentin Bufler

Yeah, yeah, I notice that a bit as well.

Also, with design thinking, these buzzwords, that are just losing their meaning and...

#### 0:14:17.690 In2

Exactly.

## 0:14:17.650 Valentin Bufler

Kind of what you also said, this idea of, for example, implementing design within organizations comes with "fun workshops" that kind of drag you out of your everyday work life, I think it's also inherently hiding the fact that design work is very serious work, if done right at least.

#### 0:14:42.880 In2

Exactly so. So the interesting thing is that it is almost like when a society is getting used to sugar, so a lot of sugar in food, a lot of sugar in ketchup, a lot of sugar in bread. Whatever. It's difficult to make society distance itself from it again. So it is really attractive for people to be triggered by sugar or to be aroused in a pleasurable way. So, the thing that happens often is that in design consultancies, there's... So if you want to create pleasure in an organization and we come in later and we do something and those people say, God dammit, this is difficult, so we really have to get our brains

around it, then people get disappointed and they want to go back to the pleasure they experienced before. So, the funny thing is, in doing what a lot of other studios are doing, you really destroy something. You can't go back anymore. You create a point of no return. So that's the whole difficulty. So if ...

Yeah, again, if you once fed society with sugar, then it has affected that society with sugar. Then it's really difficult to say, "OK, people sugar is not healthy, let's kind of remove all sugar from all food". Yeah. It's not gonna work.

0:16:33.500 Valentin Bufler Yeah.

## 0:16:33.820 In2

So it's really interesting I think how – and that's I think a principle that kind of relates to everything, it's not only strategic consultancy – but where you feel that we, as humanity, create our own dependency on things that are not good for ourselves... It's so interesting... And I think to be honest, when you talk about strategic design, it's not only what you deliver as content, but it's also of course to create an additive. So strategic design is not only making something, making a strategic proposal, but it's also making people understand that in order to create the strategy you need to have a completely different attitude than the kind of solving today's problems. Whatever.

#### 0:17:43.100 Valentin Bufler

And how do you keep clients engaged and on board when having these more difficult conversations?

#### 0:17:51.190 In2

Oh, it's very simple, it just takes time.

So that's maybe the third difficulty. So if you look at the business model, if you really want to make something that makes sense, it takes time. And that's of course opposite of how organizations work because time is money and money is something where they say, "OK we want to be willing to do it as cheap as possible". So the interesting thing is that if there's not enough time to unravel that complexity and to change the working attitude of people then it may be better not to do the job. And it just takes a lot of time to create the right conditions before you start doing things. Yeah. So my experience is that it takes a minimum of two years between the first conversations with an organization and the execution of a project because at first you have to convince a few people within the organization, then the people within the organization have to say, "OK, Now I understand that the test takes half a year. Now I understand what you're saying. Yeah, really, really interesting". But I also understand if I'm gonna do it now myself, there will not be any kind of leverage within the organization. So at first I also have to prepare the organization.

So that's another half a year. And then you have to think of, OK, but what kind of subjects are we gonna work on? That's another 1/2 year? So it's just this process where you need a lot of time before you can do what you want to do. And that's something completely different I think, than what consultancy normally is all about because you just sell your consultancy. You want to minimize the investment in the beginning and you want to maximize of course your billable hours. But, that principle is not applicable when you really want to do it right, I feel.

## 0:20:15.90 Valentin Bufler

Yeah, I also notice that a lot of time consultancies come in and in the end they give recommendations and then before actual implementation happens, they leave again, which then obviously leads to other problems and especially in a strategic context, I feel that there needs to be much a longer engagement with a problem, a project or an organization.

#### 0:20:35.360 In2

Exactly. And that's why we say we don't want to talk about clients anymore, because it's stupid. Because in the word client is already a power relationship hidden. So the client tells me, "OK, I pay. So I have the right to decide in whatever direction we go". I don't like that at all because in the end, we defend society. That's how I see it. We are a group of organizations [read: we both are organizations]. And you can put all kinds of names to it. And we are just interested in the world outside. So we're interested in

the outside world. We're not interested in the economic situation of my own organization, we're interested in the outside world. And based on that shared interest, you can define not a project, but you can define a common assignment of a common responsibility you want to share. So it's not about seeing the world as something that you harvest money from, it is something where you take responsibility for, which is *completely different*. And in *taking the responsibility for...* That's where the value exchange is going to happen. But that's completely different from saying, OK, we're an organization, you are in need of a new strategy, we do exactly what you say, we bring it to the table and then we run away.

I like to be engaged with society.

And I see that constellations of organizations are necessary to make happen what we think is needed in society. I see that as a kind of a dynamic constellation of interrelationships you have to manage. So the type of projects we do are on 3 levels. So we have this big project on the future of. So it's an... It's a flooding program by the Ministry of Infrastructure. So it's the future of: how can we make the Netherlands in relation to Europe, a safe country in relation to climate change? And what we bring in... so we are not the experts in understanding how many centimeters the water will rise every year. Because that's an expertise of course we do not have. But what we are interested in is how does society relate to an assignment like that? So how does society kind of relate to the idea of border management or water safety? And often what society feels is meaningful is not brought into that equation of these big assignments. That's really interesting, I think. So we are mainly interested in: how can you make these big societal assignments, like the energy transition, a societal issue instead of a quantitative, goal oriented policy push reducing, carbon dioxide or whatever. And then that's also what we do in the field of psychiatry. So about the psychiatric well-being of people

And that's also what we do in the field of democracy. So we're working with six ministries on the future of information and how information has a very important role, of course, in how citizens feel that they're part of democracy and part of the rule of law.

But these are things that we know of that for the upcoming 10 years we are active in this field. And we as designers create the consistency. That's really funny. So from the other perspective, you're a consultant, you bring a strategy to people, you run out, and then the organization is responsible for the consistency over time. And I think what we do is we take that responsibility to keep things going. It's really funny. No one is paying us for it, but someone has to do it.

## 0:26:18.110 Valentin Bufler

Yeah. Do you feel that your own organization as studio had to change structurally to be able to work that way?

#### 0:26:25.740 In2

No, I think that it's a very natural process where also the people coming in bring of course also other expertise which is changing our organization. So the organization how it started in the beginning is completely different, simply because of the people that are here. So every time there's a new person coming in, we have another position as an organization. So it is this very natural correlation between, I think, how you grow as the sum of individuals versus what it means with relation to the outside world. It is a very natural process. And of course you, sometimes, look back and say, OK, maybe we should have made that decision earlier to reorganize, exactly what you're [pointing at the interviewer] trying to say. But that's often also very difficult to do, to do it the other way around.

So my answer is: no, we didn't have to change our organization, but there are these very important guidelines within our organization that, for instance, everyone here within the organization feels that he or she – of course we work within kind of a framework and a common understanding what we mean as a group – but in the end, everyone kind of represents his or her own position.

Because that's the only thing which you can do in the beginning. So if I ask you: "do you like avocados?" and you give an answer from the point of view of an organization that's just impossible, because you don't know how many people in the organization like avocados or not. So, I think it's really important that everyone feels empowered to give expression to his or her agency within the organization. That's important.

## 0:28:58.810 Valentin Bufler

Yeah.

And what were triggers that prompted you to move away from more product based assignments to these bigger societal issues?

#### 0:29:11.460 In2

Oh, I think it was a bit of a negative situation that occurred. So I started in 1992 and then I was in the middle of that [situation where] industry brought their production outside of the Netherlands. So first they went to Portugal, Poland and then to China and so on. So I've seen it all happening. And the assignments within that field just became less because of it and then you had to compete with other design organizations and I'm just really bad at competing... So it's not even that I don't like to compete, but I'm not good at it. So when we do pitches with other organizations, we often lose. So we're not good at pitching at all. And therefore I wanted to open up something where there was just not any competition. So that's the reason why we started doing it.

Sometimes people ask. Yeah, but Matthijs is there enough? So if you work for Phillips, those are the big organizations, Phillips, KLM... so we worked for Phillips, we still work with KLM. We work for something. So we work for the big organizations. But the biggest organization I know of is society. So... yeah.

#### 0:31:10.230 Valentin Bufler

Yeah. And what makes a challenge in your view strategic? What is kind of there the difference to maybe more traditional design briefs?

#### 0:31:21.690 In2

I think the design briefs are often object related. So: "this is what we're gonna do, this is what we're gonna make, this is what we bring to the world" and I think a real design brief should deal with "this is what we want to accomplish with people". "This is how we see society working" or "this is how we see society not working". So I think often strategies are completely defined on the wrong level of abstraction [read: So I think strategies are often defined on the completely wrong level of abstraction]. They're often at the means level and not at the goal level.

## 0:32:2.20 Valentin Bufler

Hmm. I see. Yeah.

And did you have to build any certain capabilities within your practice when you made that change?

## 0:32:11.940 In2

Yeah, that's I think how lucky I was that I started doing research from 1992 at the university about design methodology. And I didn't know beforehand that it would lead to this. So of course the organization here is kind of like a logical representation of the theories we all put on the table in the last 30 years. And it keeps on going, of course, it keeps on growing because every time you find something else that you don't know of yet how to deal with it, and since I'm still kind of involved in university, I can bring new knowledge to the table. We look at it and we see how we can implement it. And also of course, by bringing in other people. So we just hired a new employee who has a PhD in political science. And people like him, of course, bring theories to the table as well. So it's a never ending evolution of "how can we get a grip on the world through the theories we develop?" And how can we make as few mistakes as possible? Because I think that's in the end, the overarching assignment: That we have to... So: if we have specific goals with this society, like: "we want to bring the rich and the poor together in 40 years" and we have all good intentions to do so, but in the end, everything we came up with to make that happen had the opposite effect, then we failed. So we have to kind of punish ourselves that we were not professional enough to give expression to such an important assignment.

And to be honest, I think that's often lacking with a lot of strategic agencies, that they don't have the theoretical knowledge at all to be sure that [they are] a little bit moving into the right direction. They don't have a clue. So they really don't have a clue. And I think that's rather irresponsible, to be honest. And I'm not saying I'm good, but I only say: we have to avoid making mistakes.

## 0:35:4.800 Valentin Bufler

Yeah.

With that ever changing knowledge within the studio and also the ever changing assignments you have, does that also mean that your approaches and methods are always changing or do you have certain ones that you come back to?

#### 0:35:19.920 In2

Yeah. So, ViP is I think key to everything because it's kind of a basic structure which still allows for a lot of exploration. So it's a framework that gives us freedom. And so if we have frameworks that give us freedom, then it's fantastic. If the framework is gonna be dogma it is withholding us [from] growing then we are on the wrong track.

But we're not there yet. So within the framework of ViP everything is still possible.

## 0:36:11.830 Valentin Bufler

Is it also helpful to have such a framework when speaking to the organizations or the people you work for?

## 0:36:19.130 In2

Yes, of course, because my defense is not that we did a nice project for another organization, but my defense is "this is how we think the world works". So I defend knowledge. I do not defend our own work. That's a completely different position you take as a consultant. And I don't know if you know it, but I can become so grumpy from tools like working with Personas, which I think is completely bullshit from a theoretical point of view. And a lot of consultants and strategic consultants use those kinds of tools.

But I think it's irresponsible because from a theoretical point of view, it is bullshit and therefore we should not use it. Or not in the way they are used. So I think you can use personas, but not how they are being used. So if you can prove it's bullshit, why are we teaching it our students at our own design school? So in every meeting we have with the professors I put this on the table. And people agree with me, but nothing happens. It's really funny.

## 0:37:48.900 Valentin Bufler

Not even now that they redesigned the Bachelor?

#### 0:37:52.100 In2

I hope so. Yeah. But in the Bachelor, it's still there, I think. Yeah.

#### 0:37:56.500 Valentin Bufler

Probably... I don't know, to be honest. Yeah.

## 0:38:0.370 In2

I think I think in the bachelor's it's still there. It is a little bit better, but if you see what kind of knowledge we created in the last 30 years, and if you see how much of that knowledge in the end is now part of that bachelor I think it's only 10%. So I think we could have been much more ambitious over there.

Yeah.

## 0:38:31.820 Valentin Bufler

Yeah, from my background, I didn't really learn methods in my bachelor's degree since it was an art school. It was much more intuitive.

And it was interesting to now work together with the students here who are very much raised on methods.

And kind of to find the middle ground between the structure and the help it can give you, but also like I said, avoiding the rigidness that sometimes methods can have.

0:38:57.110 In2

Yeah, of course. Exactly. So when the method starts to create constraints then you really have to be careful. It's what happened with 3D modeling in the beginning. Because 3D modeling couldn't yet do what people wanted it to do with surfaces, for instance, so you could only do relatively simple surfaces when you created the product. And you see it literally in the design of the products that you [can] see the limitations of the tools that were being used. And I think that's fair and that also applies to strategic tools or roadmapping tools or whatever so... Yeah. And you constantly have to be aware of it. So I think in the end, of course, you can't avoid it, but if you don't even talk about it yourself, as an organization, that you may be limited by the tools you use then I think you're on the wrong path. Maybe the last thing I want to talk about is this: the good thing about not working for organizations, but standing in society and looking around you and organizing constellations of organizations who feel also that responsibility, is that... It's about... So how much do you ask for the consultancy hours? So what's the price of your work? And you see there's of course an enormous increase of hourly rates in relation to strategy making, so I know of a design consultancy who asks I think €300 an hour for their master. And it's not that I'm against it, but if you're for instance working in the field of psychiatry and you see people suffering and you see people not being taken care of because there's not enough money to create a proper network of care for those people, then it's almost undefendable that you asked for €300 an hour as a consultant. So I think the good thing about not seeing consultancy as something within the boundaries of the client-service provider relationship but starting from being connected and engaged with the world that you automatically start to wonder, "OK, so maybe it's completely outrageous". So maybe even €120.00 an hour is even a lot of money... Maybe €75 is maybe a lot of money. I don't know... But I think it's also very important as a strategic consultant that you stay kind of connected to what is acceptable or appropriate. So the word "appropriate" I think is very important in the world of strategy making. And then you don't see strategy making just as a golden bullet where other organizations are willing to pay you the highest price for. And I think we've shown that we can create an economic... "Success" is a big word, but we're already here for more than 30 years, and we're growing. It's OK.

## 0:43:9.50 Valentin Bufler

Yeah.

And would you say that... I guess how would you describe that your industrial design background or in general your mechanical engineering background influenced the way you go about with strategy making?

## 0:43:28.270 In2

So I didn't learn at a design school or industrial design engineering but I think the key to it is: creating a strategy is not simplifying the world, but it is trying to find patterns in the world. And a pattern is different than simplifying because a pattern also allows that there's layers under. So I think I was taught to understand finding patterns in that complex world. And I think that every assignment has its own pattern. So every societal challenge is related to its own pattern or you can say its own framework or its own reframe or whatever. And every time you have to explore what it is, you have to find out what it is.

Because the societal challenge on psychiatry is something different as a societal challenge on flooding. So if you apply it... there are organizations that apply the same kinds of frameworks for different types of societal challenges. And I don't believe in that at all. So I think that you can't do that. You can't. You can't use the same kind of patterns, frameworks from different contextual assignments. It's just impossible. So going back to your question: it's how to find that pattern that is the expression that makes things most insightful. And when am I being most insightful with the most diversity with the least complexity? That's what I'm looking for.

0:45:45.420 Valentin Bufler So it's basically about sense making?

## 0:45:47.630 In2

It's sense making and you have to look for an optimum. You have to look for a sweet spot where if you make it more complex it doesn't add anything to your understanding and when you make it less complex you lose information. And therefore it doesn't work anymore. So there's always a sweet spot.

That's exactly what you have to pinpoint. And then what do you find out if you find that sweet spot? A lot of organizations that are part of the constellation find it difficult because it's always too complex for those organizations. But then I'm always saying, "OK people, you find it too complex, but this is how society works. Do it... you can work with it or you can not work with it. If you're gonna work with it, you're gonna survive. If you're not gonna work with it, you're dead." So... it's your choice. And then they say... they become a bit grumpy because it takes energy, so it takes energy... "Ohh, maybe we have to dive into that complexity. God damn it. Fuck!". They are really, really grumpy, but in the end that's where we need to go.

#### 0:47:11.10 Valentin Bufler

So do you think that when dealing with complexity, you need that engagement, that determination to really deal with it?

#### 0:47:19.180 In2

Yeah. So it is this adaptive cycle. So you create something new and then you know there will be a collapse because people don't... It's just too complex for them to understand it immediately, but they need the time to embrace it or to start embracing it. So I think a good strategic consult in principle creates *alienation* in the beginning. And then of course you can come up with all kinds of communication tools to make that alienation as comfortable as possible, but that's the second step. If you start immediately with trying to create a comfortable situation, you're dead.

#### 0:48:14.720 Valentin Bufler

I was reading about, I guess what is called wicked problems and all these more strategic challenges. And I often come across this notion that there is not a solution to them. And I was wondering if you also see it that way and if so how do you deal as a consultancy that maybe is not always involved in a problem, but at some point has a start and an end point?

#### 0:48:39.620 In2

My answer is very simple, so I don't believe in design as problem solving. That's the most theoretical answer. Second is those wicked problems. This is exactly what I said. It's about these ill structured problems or the ill structured world and ... So all the people who use those words, they don't understand shit of design. Because in principle everything is ill structured, even this chair. So the Eames chair. So if I lift it up, I can... In this object there are so many wicked problems! So it's everywhere. It's not only strategy making, but it's everywhere. But because you know that... and that's I think the beauty of it, the world allows for a multiple array of meaningful interventions. So a solution implies that it is the perfect solution for the problem we have defined. And that's not what design is all about. Design is giving society possibilities to start using [read: Design is giving society possibilities to use]. And there is an array of multiple possibilities. So if I think of democracy and I see democracy as a problem because maybe people don't believe it anymore. The problem is that people do not believe it anymore. And then you start to solve that problem. I will tell you, that has a complete negative effect on what democracy is all about.

Because one of the things ... So you know you have these councils, these citizens councils, in France they started with them. So OK, we take 100 people from the street and they're gonna think about societal issues and we ask them to solve them and that's what we're gonna do as a government. That's completely a-democratic [anti democratic]. Because we agreed on this democracy, we are governed by the majority, and we have to live with the idea that the majority can make decisions that are of meaning for us. So why do we need a Citizen Council to advise us, because who is the Citizen Council? Who are they representing? I don't know. So the thing is, going back to your question: we have to get rid of this whole idea of wicked problems. Bullshit. Because in principle the world is like that. You can say it's about complexity, but then you have to also be able... But what is complexity? Because the word "complexity", you can use it very easily, but if nobody knows what you mean with it you can also not unravel it. And I think there's not any understanding of it, also in their system design bullshit, what they mean with complexity. Because I think in system design they say it's this multiple stakeholder

decision making that is really complex. Come on, that's bullshit, because we already did it for 2000 years. We make complex decisions... So it's not true!

Where did I want to go? I lost it....

0:52:23.320 Valentin Bufler About complexity and the understanding of that.

#### 0:52:24.810 In2

Yes, so I think what we need is a clear understanding: So, what is design?

That's [number] one. So design is not about problem solving, but it's about giving society opportunities. So it starts with the definition of design. Then it starts with the definitions of the concepts that live within design: What's complexity? What is a stakeholder? What's a stakeholder constellation? What is ... Because you need to know them. Otherwise you don't know what you're steering [towards].

And then maybe you can find out: OK, how can we start organizing this whole process and what does the strategy mean? And who is responsible? Where are responsibilities? What *is* responsibility? And I think to be honest, that the strategic people, also within industrial design engineering, are really good at not giving answers to these fundamental kinds of questions.

And they love it because therefore they can just keep on doing what they're doing for the rest of their life... And also creating a lot of bullshit.

#### 0:53:38.430 Valentin Bufler

Yeah, I know with my literature review now how these terms are often so meaningless and everybody uses them differently and there's not a shared understanding of what is being addressed basically.

#### 0:53:54.610 In2

Yeah. Exactly... So if you say that design is problem solving. That's for me okay, because then you start on that one and then you can understand how to build further on it.

But again, so I think if you see... So I always say as an example... Because in the end it's called design is not problem solving but creating meaning and then people say yeah, but what do you mean? "Meaning". Of course I can give you a theoretical kind of answer on that because I can pinpoint exactly what I mean with "meaning". OK, not gonna do it now. But I always give an example and I I give an example just by writers who write novels. Because writers write novels, they don't start from a problem. They just write a novel. And then people read it. And those people, they say "that book of that writer. God, did you read that book? It's just mind blowing". And that's exactly, I think, what design is all about. So you do something that was not expected. And was not the solution for any problem. Whatsoever. It's just there and it makes sense. And maybe it could be a solution for a problem, but it shouldn't start from that idea.

0:55:24.40 Valentin Bufler Yeah. Definitely a lot to think about.

0:55:31.790 In2 Well, I'm... I like to be kind of...

[call cuts out, connection issues]

Am I still there or not?

0:56:7.270 Valentin Bufler Uh, now you're back.

## 0:56:8.770 In2

OK.

No, I was saying that in the study, you making and marketing the literature is so thin from a theoretical point of view. And I'm really looking forward to people who really make something theoretical profound from those perspectives. I think it's so interesting. But because if it's about strategy making, it is about the understanding that people long for a grip of the future. So it's very philosophical. And I've never seen any paper from our department that makes connections like that. There's a little bit Roy... Roy Bender. He's doing speculative design. He makes that link. I like that a lot! But if you have any papers where you think "Matthijs, you're completely talking bullshit, because I know a few papers that really blow me away because of their theoretical profoundness", send them to me. But I don't know them.

## 0:57:32.220 Valentin Bufler

Yeah, so far I haven't really found those either. I just find contradicting papers and questioning also in doing this project very much where I'm standing and what my beliefs are.

#### 0:57:45.780 In2

They're mainly beliefs and you say correctly, there are mainly beliefs, yeah. Yeah.

#### 0:57:54.630 Valentin Bufler

Yeah, that is true.

Umm do you have any questions for me before we get to the end of this?

#### 0:58:3.220 In2

No.

#### 0:58:4.300 Valentin Bufler

OK, then. Thank you so much for your time and for your insights.

I will let you know if I'm using anything from this, so I can quote you.

And if you have any interest, I can also send you the report at the end.

Umm.

Alright.

#### 0:58:22.300 In2

Yes, I yeah, yeah. I think I would love to see it. Yeah. So what's the goal in the end? What do you have in mind?

## 0:58:30.150 Valentin Bufler

Umm, the goal is a bit I guess bringing together my more industrial, my more traditional product and process design education with the strategic design. And I notice that a lot of design studios who operate more traditionally are... I guess struggling to survive because like you said, with the move of production and all that, they're kind of, yeah, they don't really know what to do and then they start doing strategy as well and it's very often just product development or I guess design strategy, but not really strategic design.

And yeah, I guess my question is a bit, how can these capabilities and knowledge, especially practice based knowledge, can be still helpful in strategy and strategy making?

Umm and how can they also transition into that more effectively I guess?

These organizational changes or positioning.

Umm.

Yeah.

So it's a bit uncertain right now what the end result will be. I'm probably something that all strategic design people do here.

But yeah.

## 0:59:42.120 In2

But what I like about your observation is that I hear a little bit of opportunism in your analysis because

you say there's not enough work and then we do something next to it, like an extra feature on top of our portfolio.

I think it would be really nice... It would be really nice if you have kind of like an honest deconstruction of what people do and I think you have a really good... I think your observation is right.

And I think I would do it too, or I did it too... I did the same thing but it went together with this kind of completely new understanding, more theoretical understanding.

And so I'm not different from those people because I also moved away from something because of specific reasons.

Umm.

But yeah, ask those people. Maybe if you still do interviews. If they're really convinced in... In, if they make a strategy, if it makes sense or not.

#### 1:1:7.260 Valentin Bufler

Yeah, I think often it still uses this like you said, solution oriented understanding of design and then it's basically just an add on to have, kind of like a whole package deal that you can offer and. Yeah, it's often a bit underwhelming I guess. And I say it cannot really create change because it has to be done within, I don't know, half a year, a year and then they leave again. It's also very much centered on this idea of innovation, which is again a super hollow term by now and...

#### 1:1:43.900 In2

Yeah.

I think you're on the right track, so it feels like you... I like it. So, maybe because it is something really difficult because exactly what you say you couldn't find any paper that really changed your opinion about the issue, because it's mainly kind of believes rather than theory, so that there was not like "OK, the world is flat and now the world is kind of like a round", that's what you didn't bump into yet. But I think that we'll need a little bit of something like that to happen. And of course it's too ambitious to say that you will do it in your graduation project but having the ambition to do it is great. And I think I was just also thinking about wicked problems... I was just thinking: so people in the world of physics, for instance, who work in the scientific world of physics, do they ever talk about wicked problems? They have a really complex world! And so I think to be honest, when you use something as a "wicked problem" you, in a way, also distance yourself from the responsibility dealing with that complexity, because you say it's wicked, so it might go wrong. It might go wrong, people, because it's wicked. So, we crossed the border of wickedness and now umm it might go wrong. Yeah, fuck it.

## 1:3:41.810 Valentin Bufler

I mean, it's also interesting that this is a term from the 70s and it's still around and nothing really has developed since then... that's an interesting point.

#### 1:3:51.190 In2

Maybe. OK, I have one final thing. So if you can come up with a new word because you said it yourself, "wicked problems" comes from the 70s. If you can create some kind of new word in relation to strategy making that would be very interesting.

1:4:14.20 Valentin Bufler All right.

#### 1:4:14.160 In2

I don't know what kind of word. Can be "banana". I don't know. I don't care. But because then you're kind of moving into a new reality, isn't it?

1:4:26.630 Valentin Bufler Yeah.

## 1:4:28.120 In2

So if you're final report takes all the boxes: wicked problems, strategy making, road mapping, then you know, "OK, I was within those boundaries". I was working within those...

1:4:45.930 Valentin Bufler

Umm.

1:4:47.600 In2

Yeah. So.

1:4:49.940 Valentin Bufler

Trying to get out of that.

1:4:51.530 In2

I would be really interested. So I think you can do it. I feel you can do it.

1:4:56.230 Valentin Bufler

Thank you.

1:5:12.350 In2

Yeah.

1:4:58.940 Valentin Bufler

Yeah, I will definitely have a couple of crises of "what is design?" and all of that. "What am I doing here?" But I also think it could be very helpful for me going forward. What do I want to do with this education that I have now going forward?

1:5:13.570 In2

Yeah. And I think when you, maybe, take something like creating this new world as something [that you] constantly bring with you, you are in the designer mode yourself.

1:5:26.550 Valentin Bufler

Yeah.

Yeah.

1:5:27.380 In2

You push yourself in the designer mode instead of an analyzing mode, and that's nice too, because in the end you're a designer.

1:5:35.240 Valentin Bufler

Exactly, yeah.

All right.

Thanks so much and have a great day.

1:5:43.880 In2

Thank you.

I loved it.

1:5:46.330 Valentin Bufler

Good. Me too. Bye bye.

## Interview 3

[Trying to find a meeting room]

0:5:36.760 Valentin Bufler

The consent form we were talking [about] last.

0:5:39.600 In3

Yeah.

I did not send it back yet or.

0:5:44.420 Valentin Bufler

I did not find it, so maybe if you could send it again it would be great.

0:5:51.490 In3

Well, remind me after what's.

0:5:53.720 Valentin Bufler

Yeah.

0:5:57.420 In3

Yep.

Yeah, I'll do that.

0:6:9.130 Valentin Bufler

Alright.

0:6:8.660 In3

A for didn't send.

## 0:6:11.390 Valentin Bufler

Perfect. Then maybe to start things off, could you tell me a bit about yourself, your background and what your practice does?

## 0:6:20.630 In3

Yeah. I'm In3. One of the founders of springtime. I am also a Delft University alumni and graduated '95 at the Industrial Design and together with three other partners we right out of university started our design practice. Few years under a different name, still in Delft, and then quite quickly moved to Amsterdam. And since I think '99, we are called Springtime. Yeah, ever since then. So now I'm still with one of the original partners owner of the studio. We have had a lot of interesting adventures, from offices in Taiwan, in New York and also other ventures that we participated in, but as of currently still running a small studio in Amsterdam focused on "new mobility design" as we call it.

## 0:7:36.370 Valentin Bufler

... "Small studio". What do you mean with that? How many people would there be working?

0:7:43.620 In3

We are here with the six.

0:7:46.400 Valentin Bufler

OK. Yeah. That's nice. So that means it's also an independent studio.

0:7:52.190 In3

Yep, independent studio.

0:7:53.580 Valentin Bufler

Yeah.

#### 0:7:58.250 In3

I don't know if you want to go into that already, but through the years we have also had different sizes and the waves of the world, and the economy, and all the other departments and also... That, at a certain point, we more and more decided to focus on the new mobility design. So originally, we did also a more broad field of additional design, although the mobility was also always a center piece, but also in our communication since 10 years, we really communicated a focus on mobility and also positioned us as a specialist in that field. And as a result of that, we also have a quiet international client base, so from... of course, Dutch/European clients, but also from China and the US, for example.

## 0:8:58.0 Valentin Bufler

OK.

And so you would say the trigger for these changes were mainly from the outside, that the demand changed or the economy changed?

#### 0:9:7.760 In3

Not so much that... the developments were more that like, as I mentioned, we started in '95 and then we grew at a certain point until a studio of 25, which was for big part also engineering and then we had hit a couple of crisis. So we also had to part with the a larger group of employees and since then we started to focus on the... [we] decided to focus on the front end of the design process. And also because that's also our own main interest and bestie [?] also... And so that was a bit of an outside development also because at that point in time, we also saw that a lot of companies build up their own in-house capabilities on that end, and so a lot of clients that we worked with more and more did the engineering and pre production in-house. So and I think from that time on and I'm talking a bit like 15 years ago, 20 years ago then you also saw that you either were a design studio or a real engineering studio and like the model to do both is a bit more the 90s model. And although they still exist, but we also see recently — and also we have been discussing that internally — that right now that also changes a little bit, also because of the introduction of technology, connectivity and such that now we get more and more clients that don't know anything at all, so that are like newcomers in the markets. And so they need more assistance than only the 30 [service?] in design. Let's put it that way. So they are interested in the whole package. We also talked to partner companies that do the connectivity or the engineering or the manufacturing. So normally we bring them in at clients request but we're also evaluating if we should make that a more structural position to the market as well.

0:11:37.20 Valentin Bufler

Umm.

Yeah. So that means over time the clients changed also?

0:11:41.930 In3 That definitely.

0:11:42.660 Valentin Bufler The type of things, yeah. Is it also based on the size? That maybe the larger.

0:11:49.670 In3 Of our size you mean?

#### 0:11:51.280 Valentin Bufler

Yeah, that maybe the larger clients are more capable of having in-house teams and now the smaller are more interested in still outside design capabilities.

#### 0:12:0.900 In3

Yeah, well the like I said, the startups are newcomers in the markets in general, they see general developments in society or the market that they see potential, but they typically don't have the experience, whereas clients like Mobike or lyft, they do have their in-house capabilities, but they are more looking for the specific expertise to expand that.

#### 0:12:30.700 Valentin Bufler

Yeah.

Does that also mean that the type of relationship you have with your client changes from maybe more project based to long term relationships or is that not something new?

#### 0:12:42.810 In3

Yeah, but not change much because that was always the case that you are very much a partner in the development.

#### 0:12:51.530 Valentin Bufler

OK.

Nice. Was that something that was requested from the clients to have that type of relationship or is it something you put value in?

#### 0:13:0.870 In3

Yeah, I don't know if that's specifically something we do, but that we have been doing it always... That we also... also in our career we experimented a lot with different business models as well. So if it's like in the royalty model or or venture model to to even invest in companies... or even start up our own initiatives, that's the entrepreneurial part of the development process is something we've always done.

## 0:13:37.440 Valentin Bufler

Yeah.

OK.

## 0:13:38.620 In3

Sometimes also more for marketing purposes, so as a result, as a consultancy your portfolio is very much determined by your client requests, and, as you probably may know or may not at your age, a lot of projects never make it to the market for variety of reasons, and because there's internal, different decisions, there's market developments or whatever. So yeah, well, let's say half of your work doesn't even make it to... So that also limits your marketing possibilities. So that's another reason that we have always done a lot of [our] own initiatives that we use for marketing purposes, to present ourselves in a specific segment.

## 0:14:33.460 Valentin Bufler

Yeah. OK.

And could you maybe tell me about a strategic challenge that a client had for you and how you address that?

#### 0:14:46.0 In3

And what do you mean exactly by that?

## 0:14:50.690 Valentin Bufler

Umm. So. I'm kind of interested in.. A lot of traditional design studios do question a brief, but maybe it's not necessarily what the clients ask of them, and I'm kind of interested in the ways that clients do

ask now design studios as well for more strategic questions. And yeah, just if you have an example there.

#### 0:15:20.960 In3

Yeah. Well, to be honest that that is indeed a lot of times the model that you have to convince them to challenge certain starting points, but for example, in the example of Mobike, which is a Chinese shared mobility company that's now operating under a different name after this, they're now called Mitchum. And so their request to us was to develop an ebike... At that point they were only making regular bikes, but that brief was fairly open so the... Actually, they wanted a motorized vehicle. So also in our strategy, in the concept phase, we explored quite wide what that unit could be and that was also a part of the project proposal and the same with lyft, which is like the... where are you from actually?

0:16:27.950 Valentin Bufler Oh, I'm from Germany.

#### 0:16:29.510 In3

Germany. OK, so lyft is Uber competitor that's a bit less known on this part of the world, and like Uber, they were also going into the micro mobility segment. So they are besides the ride hailing also renting out shared scooters and bikes and partly they do it by purchasing companies and but partly also by doing their own initiative. So that was also a very different challenge because inside their company they did not have the experiences as vehicle developers. And also the solution in the market was quite open. So there it was that they wanted to have something different than an e-scooter, like the step scooter you stand on that we know from various European cities ... so that was also quite an open strategic question like what should the vehicle be? or what? But also in that case they actually also asked another studio for like a previous strategic phase.

0:17:50.960 Valentin Bufler I see.

#### 0:17:50.820 In3

That guy did not put the question to us, but they did hire an agency to think about the strategic pre-phase. I'd put it that way.

## 0:18:4.270 Valentin Bufler

Yeah.

And in the case of such a micro mobility brief would you then just consider the object the... basically, the product in the end, or would you also look into, for example, regulations or laws that might have to be addressed or are kind of part of the whole thing?

## 0:18:25.930 In3

Yeah. No, no, different. In that case, it was also going broader into like how the system really works in the city: Where to park? Where... How the vehicles would look like on the streets also. And if there's not one but ten of them so. But to be honest, that was also a bit... Again, our own initiative, like the team really wanted to develop this two-wheeler. Whereas we were really challenging like what the requirements for it should be. And that's a lot of times the problem that [they say] "Yeah, yeah, yeah, that's really... that's a good point." But in the end they still followed the path of developing the vehicle. Which is, in the end, very frustrating. Probably also the reason it's still not there, I mean... Because they didn't think about it good enough. Like how it works in the city and what the policy makers think of it and the... And so that's a lot of the... but that's of course on a lot of strategic questions also: We proposed to them to think about the circular design and the circularity of the vehicles and everybody loves it. But then soon after, of course "Ah yeah, that's a great topic, but now, first, let's finally finish the project".

0:20:2.770 Valentin Bufler Probably cost is also always the thing. 0:20:5.140 In3

Yeah, yeah.

#### 0:20:5.880 Valentin Bufler

Yeah, OK.

And in order to address these more systemic or strategic parts that you have to grow any capabilities within your practice.

## 0:20:20.970 In3

Well, that's mainly as one of the founders my capability to know a lot about mobility developments and what's going on in the world and that end. So in that case not, in the case of... that's always a bit... like you were asking about regulations, that's such a specific topic that you really have to hire specialists to look into that. And so in that case we would have needed to address that. More back, we also did like a much more strategic pre-project for a European "next vehicle" project where we looked at the different markets and the different requirements and...

#### 0:21:13.780 Valentin Bufler

Yeah. Yeah. You also mentioned earlier that the designers in your team are interested in these fuzzy front end questions, so I guess if that interest is there, then it's also easier to address them within the team.

And for specific questions, do you hire external experts to advise?

#### 0:21:36.260 In3

Yeah

We also recently did a project for a one person car where we also — which is a start up from the Netherlands — and where we also introduced a phase to challenge the design brief to think about: OK, which vehicle category should it really be, that we interviewed various development companies to also get a better feel about the required budget to really bring it to the market. We do benchmark research to visit competitive companies to also get a better understanding of the size and the scope of the project. So that was another example that we did... but also, well in house and interviewing relevant people.

## 0:22:26.670 Valentin Bufler

I see

I guess what I'm also wondering is these different questions than our capabilities that maybe you need to bring as an organization. Does it also mean that you have to change your organizational structure?

## 0:22:46.270 In3

Yeah. Well, for certain projects you would need to, like we did also a project for the Dutch railways where we did a project on the station of the future. So like how... Is it maybe more the surrounding of the station than the station itself? Like how should we... How will people travel through the station in 2035? And how should this station environment be changed? Like how do people get there? By their personal bike, by their shared mobility, by their shared car? By autonomous shuttles? You name what... So in that case, we also really looked at this whole travel pattern.

And then there was also a project where we were a bit hitting the boundaries of our own expertise like that we can say a lot of things. But to really be believable and that respect you need also for a certain credibility. And so that was a project that we thought that it would have been better to have somebody in the team that has like a credible record and that you can really produce more facts too, because a company like the railways, that's probably not that different than Deutsche Bahn, it's like a semi-government organization. So they want everything to be presentable to their higher management and of course nobody's really interested in the opinion of some kind of designer, but it really should be what the general consensus is.

So that's very different than like a commercial enterprise where if you have a click with the decision makers and you were very opinionated on some thing and that specific person believes in you then that's enough. But that works very differently than a government organization or a large company.

#### 0:24:58.730 Valentin Bufler

Yeah

I can imagine it's also not only about the internal structures that maybe need to be adjusted, but also the positioning or like how you present yourself to potential clients.

0:25:10.450 In3

Yeah, yeah.

## 0:25:12.380 Valentin Bufler

OK.

And would you say that your industrial design background influences how you address these strategic challenges?

## 0:25:23.700 In3

Yes, certainly it did. In general that's of course one of the reasons that designers are more and more used for this, for a variety of challenges that you... Especially in Delft, you'll learn a problem solving process that you can apply to various things, so that definitely helps.

I think also in scenarios not like linear but you can assess different potential scenarios, how something can work and visualize them. Which is the difference, or a distinguishable or a unique selling point. That's that we are also learning that in processes or projects like that you can make something visible is also a big asset that communicates a lot better than a couple of pages of text.

#### 0:26:23.680 Valentin Bufler

Yeah

Do you have any specific methods that you then use over and over again? Or is it different every time?

## 0:26:33.280 In3

No. Well part of the design process from Delft, which is like the, I don't know if that's still been taught, but the, in Dutch, it was the liberties [?] model, but that's like the convergence and divergent sequence. And like the research, scoping, analysis, ideation concepts. So that's the standard process we always use. And then within the creative phases, that's also the typical tools that we also learned in Delft, from brainstorming to morphological maps to things like that.

# 0:27:18.220 Valentin Bufler

Yeah. And in your experience, they are pretty much the same for hardware industrial projects and more strategic projects?

## 0:27:27.0 In3

Somewhat, yes, of course. The strategic projects are a bit different in nature, so they don't... so you do maybe one divergent convergence exercise and validate them with different knowledge than in a regular design project.

## 0:27:48.300 Valentin Bufler

Yeah.

OK.

And then in reverse does that, where systemic strategic work also influences the way you approach pure industrial design projects?

## 0:28:4.720 In3

Yes, it does that in that sense that you... that's also a bit my role as one of the founders that I'm less involved in the details of a project, but that I do look at like what are we doing here and this... anyone looking for this kind of solution in the market we talked about in the beginning. So, that it is like a strategic... Well, I'm looking for the right English words like "touching" [?] in Dutch, like evaluating the project, if it's going in the right direction for what the clients can absorb and what he wants to do from the beginning.

#### 0:28:50.530 Valentin Bufler

Yeah.

Interesting. Yeah. I also heard from another interview that sometimes in these smaller client companies there's just not really anybody there that can talk strategy with for example, the CEO and they are very happy to have someone outside the organization they can kind of yeah, talk a bit more about these high level strategy decisions. Is that also something you encountered in your practice?

0:29:27.240 In3

No, not really.

## 0:29:29.90 Valentin Bufler

OK. So it's more about design projects and the strategies for those, but not necessarily the overall overarching strategies for the client.

0:29:39.620 In3

No, not... it has always a connection to product development. Let's put it that way.

0:29:47.820 Valentin Bufler

Yeah.

OK.

0:29:59.140 In3

All right.

# 0:29:52.470 Valentin Bufler

Yeah. I think honestly from my side, I have pretty much covered what I wanted to talk about. Did you have any questions for me about my research or?

Anyway.

0:30:4.490 In3

Uh, not right now, but would be interested in reading your piece on what you write on that.

0:30:13.110 Valentin Bufler

Yeah, I will send that to you in the end.

0:30:16.80 In3

All right.

0:30:17.340 Valentin Bufler

And then thank you so much for your time.

0:30:20.20 In3

Great. So you are working with Bart, he is one of your teachers or ...?

0:30:25.610 Valentin Bufler

Exactly. Yeah. He's my mentor, and Giulia Calabretta is the other mentor in the team.

0:30:31.650 In3

OK.

0:30:32.950 Valentin Bufler

Yeah.

0:30:32.800 In3

Cool. And did you do only the master in Delft or also the bachelor?

#### 0:30:38.100 Valentin Bufler

Exactly. I only did the masters here now. I did my bachelors in Berlin in product and process design.

0:30:45.650 In3

OK.

#### 0:30:45.650 Valentin Bufler

And so I guess my background is a bit more in that, let's say, furniture direction, but also industrial design. And I kind of had the feeling that it's really hard to have these traditional design studios these days and a lot of established design studios are also struggling.

0:31:7.270 In3

Yeah.

#### 0:31:7.370 Valentin Bufler

That kind of influenced my direction to look more into strategic design. And now with this research, I'm kind of, I guess, interested in how to connect it to.

0:31:16.580 In3 Yeah, well, the, the.

0:31:17.60 -Valentin Bufler Because there's obviously...

#### 0:31:18.550 In3

What is it like... an overall development is a bit that, for example in tech, that everybody builds up their own in-house design expertise, so that is a bit of a challenge for the agency world. So what happened a little bit in car design, like, of course 25 years ago, you had been a Farina Bertone like the specialized studios. But nowadays all the, like the OEM's, they have their own internal design departments, so that whole expertise is disappeared. Let's put it that way. They still exist, but they're more doing special projects or... And that you see also a little bit, especially in California for example, that like Google and Facebook that hire everyone from the agency world to build an internal capacity. So that's definitely the challenge in markets, it's a bit here in Europe, but... Also, there you see also like in the venture world, investors always want the companies to have internal expertise. So that's also a bit a trend over here. So that's the... So that also connects a bit to what I was saying in the beginning that you have to work for these companies at the beginning of their life cycle and not if they're really established. And so that also brings different requirements for the studio. And yeah, it is a challenge that you have companies like Frog or IDEO that are very big and they have like very multidisciplinary staff. And as a smaller studio it's quite difficult to get from point A to B, so although we definitely have a lot of, especially on the specific topic of mobility, enough competence, it's it's harder to, what I mentioned earlier, to have have that have like a CV of people to be able to sell that into companies. And it's also not so easy to hire a couple of people if you're like a 10 or 15 designers firm, then you cannot just hire five people that are psychologists, MBA or whatever they do before even selling the work. So that's the chicken or the egg. That's always a bit of the challenge that I see also with a lot of colleagues or in other firms.

## 0:34:2.540 Valentin Bufler

Yeah.

Yeah, I also noticed there with my research also the literature research that you have the bigger companies who have the money and the capabilities to build more in-house teams. And then for strategy, you should be in house because often it's a long term process and agencies often operate in this more project based area. But then you have smaller... like the SMEs or maybe startups, and there could be an interesting market that still needs serving because they also can't afford the big agencies.

## 0:34:33.940 In3

That. No, it's true, definitely. But that's ... we as agencies should be better in selling that also.

## 0:34:43.600 Valentin Bufler

Yeah, definitely. And also flexible enough to like you said experiment with business models because it doesn't work with royalty based business models for example.

## 0:34:55.840 In3

Interesting project in this case. So when are you planning to finalize that?

## 0:35:1.190 Valentin Bufler

Umm, end of June, beginning of July. It's the timeline.

0:35:4.370 In3

OK.

Alright.

## 0:35:5.890 Valentin Bufler

Yeah, yeah, just at my midterm and.

## 0:35:7.360 In3

Well, good luck with that. And if you have any additional questions, feel free to e-mail or reach out for a short follow up call.

## 0:35:16.100 Valentin Bufler

All right. Thank you.

## 0:35:17.530 In3

Alright.

# 0:35:18.860 Valentin Bufler

Have a great day then.

## 0:35:20.520 In3

Have a good day. Bye.

# Interview 4

# 0:0:0.0 In4

Did you send me that when you arranged the... I'll. I'll find that. Remind me at the end of the.

0:0:6.240 Valentin Bufler

Yeah, I will do that.

0:0:7.440 In4

Well, I'll, I'll take that out for you. Yeah.

0:0:9.510 Valentin Bufler

Yeah. Thanks so much.

0:0:12.10 In4

And it might. This might be your first question.

0:0:15.440 Valentin Bufler

Yeah?

0:0:16.130 In4

But if not, it might be worth me giving you a bit of a career history and ending with where I am now because I think.

0:0:25.150 Valentin Bufler

That would be great.

Yeah.

0:0:26.270 In4

Oh yeah, and can you remind me, are you undergrad, undergraduate level or postgraduate?

0:0:33.570 Valentin Bufler

No, it's a masters.

Yeah.

0:0:35.220 In4

That's. Yeah. OK. And you did an undergraduate in industrial design, did you?

0:0:41.60 Valentin Bufler

It was called product and process design at the University of the Arts in Berlin.

0:0:46.770 In4

OK. OK, nice.

Right. Well, yeah, let me give you a bit of a career summary. So I am... I always wanted to do design at school and my design teachers didn't... Back in the 1980s were essentially woodwork teachers and didn't ... woodwork and metalwork teachers and didn't know an awful lot about the... what I later turned out to call you know, product design, industrial design. So I was told that if I wanted to design cars, I'd have to become an engineer. So... because that's what I wanted to do. And so I buckled down and passed my maths and physics, went off and, you know, got accepted to the university, to engineering. I got a pre university sponsorship by Rolls Royce so I experienced a year of working as an engineer which didn't impress me. And I went to university to do engineering, but by that point I realized I didn't want to do it, and so I switched to Newcastle Port Technics where Jonathan Ive was the year above me. So that's when I joined and I... that was a sandwich course, so by the time I finished that, I'd had two years experience working for a consultancy in London and a consultancy in Holland. Did you know, NPK?

0:2:37.130 Valentin Bufler

Yeah.

0:2:37.170 In4

Uh, you know about Peter Krouwel? I worked for six months there. And by the end of that experience I

was quite frustrated with industrial design because even though I liked it, I was aware that designer — at that time, I'm not saying that's the case now, but at that time in the late 80s, early 90s — designers were treated a little bit like adolescents. You know, they were kept away from important decisions, important meetings and treated like teenagers and basically told to make something pretty after all the important decisions have been made. So, and I had the experience of being an engineer, where you were taken seriously. And I would often frustrate my managers by challenging the brief all the time. So you know, "is this really the right target market? Is that really the right technical package?", blah blah blah. So I didn't know what to call it at the time, but I wanted... I felt that I was kind of designing with kind of one hand tied behind my back and I wanted to get further upstream to where the key decisions were made. And after graduating the decision was to... I got a job offer to go to Phillips, but I realized that I would just be focusing on TV battles or somethin, day in, day out and that didn't appeal and I was offered a job at my university to do a PhD to do some lecturing and also work in our consultancy. So I had some time there just to experience more rigorous thinking and researching and things like that which I quite enjoyed, but then got frustrated by that because it was so slow and so I left the PhD and I went into consultancy.

And then, long story short, I got hired to do... you know a consultancy in London called Seymour Powell? Have you heard of that? So I got hired there into what was then called "Seymour Powell Forecasting" with a guy called James Woudhuysen and who had worked at Phillips and had set up something at Phillips called EDL. The Experimental Design Lab and he had been influenced by Fitch in the US and Doblin in the US in the 80s and they were some of the first people to do kind of research and strategy and design in industrial design. So he was working with psychologists and early ethnography and stuff like that. So I found that very interesting. But he was very... he was more from a journalistic background and very, very bright and I did some work with him, but it tends to be very research based, very foresight based and not terribly linked with design. He left. I wrote a business plan at Seymour Powell to change the team to become a lot more strategy focused. So I spent five years at Seymour Powell, basically becoming a kind of front end stage to their design process. And it tends to focus around three types of work. It was ethnography work, it was trends work and it was kind of market analysis. You know, product mapping and all that kind of stuff. I left there in 2004 and founded Plan, so that's nearly 20 years ago.

And you probably have seen the website, but we do work at the five areas, capability areas that we focus on are "Strategic Foresight", which I did at Seymour Powell, "Opportunity Discovery", "Proposition Development", "Experience Strategy", which is more about visual design identity, things like that, and then what we call "Capability Building" which is helping internal teams with their training and things like that. So I founded that. We focus on big companies, in consumer tech and mobility. So we work for the likes of Samsung, Deutsche Telecom in Tech and Kia, Ford in mobility. And now to your question that you started with about what you're interested in. I've recently made a decision to... because we've had a tough couple of years. And when the going gets tough and there's COVID or there's recessions looming, strategic projects tend to get cut. They tend to be seen as kind of slightly luxury projects. And also there's another problem for small consultants, I think as well as... or the type of work I do anyway, it's quite hard to make use of junior/midway people because it's "high octane work". It's quite hard to scale. I found it quite hard to scale, let's put it that way. So when we get busy, I would get super busy, but there would be lots of other people around me that wouldn't be so busy. And if it was a research heavy project, that's fine, but if it's requiring lots of strategic creativity and judgment, it's very hard to delegate that and I find it guite hard to find people at the right level. So I've recently made a decision to switch from a sort of full-time team to what I call a virtual agency. So I now work with... quite a few of my ex team are now freelancers but it gives me the flexibility to build teams that are really good for a particular job, so when we're working on a car project I've got lots of people in my network who are ex-Kia or ex-Audi or something that I can pull into that team and things like that. So recently I switched... I downsized. Which you know is very, very ... You're talking to me three, two days after my final employee, full-time employee, left, you know, she's now gonna be a part timer.

But yeah, so that's a quick journey [creature[?]]... I'm still very busy and I'm doing more of the work rather than trying to manage a team of midway people to do it. But that's a quick arc of where I've got to these days.

#### 0:10:48.40 -Valentin Bufler

Very interesting, because I noticed that a lot of industrial, traditionally industrial studios are switching more into strategy to become more interesting for clients. But in your experience, that's kind of the first thing that gets cut.

#### 0:11:3.320 In4

Well, I think because most people who do strategy, they do it in the way we did at Seymour Powell where they do the execution but they do the strategy as well. And there's a big difference between how you position yourself, how you market yourself and the actual work that you do. So people might position themselves as strategic, but they still might be doing an awful lot of execution work. Yeah. And the execution work still needs to happen in a recession or COVID times. I tend to focus on the big pure strategy projects which are kind of more interesting, but they're easier to cut because they're less, some of them are less connected to a particular piece of execution.

## 0:12:12.480 Valentin Bufler

Umm. And what made you decide to only focus on these strategic parts of the design process?

## 0:12:20.550 In4

Well, let me backtrack a bit to that "Seymour Powell to founding Plan" story. So when I was a director at Seymour Powell, but it was very much a... they liked the intellectual glow of strategy. But they weren't strategic at all. Well, that's not true. They weren't particularly strategic and they're very much an executional design consultancy and that's... you know, I've grown a team of about 8 to 10 people I think. And there were probably 40 or 50 designers there. And it was very much seen... And because I did quite a lot of writing and speaking —I did quite a lot of business development to help bring in work as well — and I was seen really as sort of a business development and strategic bolt-on to their core business. And that would sometimes bring contradictions or tensions, because I would sometimes feel like the right thing to do would be to say "there isn't a good opportunity here. You should stop. I wouldn't invest any more money in this." That would be the right thing to say. But that would be the wrong thing for the rest of the business, because that would be saying no to work. And I'm a bit of a purist. I don't like this sort of bullshitting, so I found that tension a bit much sometimes. And just to be clear, when I founded Plan, I founded Plan with an old college friend who was at Samsung, Samsung Electronics, and he actually became a major client of mine. So I did quite a lot of work for Samsung when I was at Seymour Powell and I found the Seymour Powell way of doing things, sort of a bit old hat, a bit 1980s and it was now the 2000s and I wanted to get more into digital, more into experience design and things like that. So I was quite in the mood to try something new and I set up with my friend Mark and we set up to be a kind of mini IDEO, you know, I'd be strategy, he would be design. And we won some amazing projects where he would carry it through to, you know, mock up models and things like that of — we did lots of work in mobile phones at that time. But it was quite hard to win those strategic projects, when you're quite a small company and it was easier for me to win the strategy work than it was for him to win the design work. And we were going after... we realized we'd set up the company to go after the really glamorous projects that everyone wanted. So IDEO and frog wanted those projects, but also the internal design teams really wanted those projects. So it was highly competitive. We won quite a lot of them, but there wasn't a steady stream of them. And anyway, he ended up leaving. Very amicably, he still works with us now. And I tightened the positioning of Plan to purely sort of research and strategy and that's when we took off. That's when we went from four people to nearly 20 people in the few years after that. So it was partly by design, partly by accident, to be frank.

# 0:16:40.470 Valentin Bufler

Yeah. And what is your experience as a strategy provider outside of a company when strategy very much often is a very core internal capability?

# 0:16:53.680 In4

Well, it's... I mean another thing that's happening in the industry was that industrial design was becoming an absolute core competency and lots of... But back 20 years ago, there was a big push to in-house industrial design, so suddenly there were a lot more serious industrial design teams there.

But at the time very light research and strategy people. One thing I forgot to say is that to a certain extent that was a really good fit because you know, if it was 30 years ago companies would be relying a lot more on consultancies for executional design. 20 years ago they were building the internal teams, so it made sense to work with... to pivot to just doing the research and strategy and integrating really well with their internal design teams. And you're right now they'll typically have some kind of research and strategy people in the team as well. So we don't tend to focus too much on the research work so much anymore because they'll often have particularly kinds of user researchers. And then also there's a new generation of designers who are very adept at research, they did it all through college. All the rest of it. But still, if you're doing the really high order strategy work where you're presenting to senior executives you need slightly more higher octane kind of strategy support and also to be frank, there's just... in reality external consultants just have higher status and then internal people they often use us [in a way] where they go "we kind of know what to do. We want your second opinion but we know that you'll be listened to you more than if we if we say it internally". So often I'll come in and I'll disagree with what they think they should do, or I'll reach a similar conclusion, but I'll take it a few steps further. So I think there's still a good fit, but it's in the nature of strategic work that there isn't a steady stream of it you know. So strategic projects are... they come around infrequently, you know, because these companies spend a lot of time executing on the strategy.

So what we'll often have clients that will give us a huge project and maybe a follow-on project and then go quiet for a few years and then come back, you know so I think that that suits my new business model where when we have some quiet time maybe in between projects, I haven't got a full team to to pay.

#### 0:20:21.880 Valentin Bufler

And your team, was it consisting only of designers, or what capabilities did you have within your team?

## 0:20:28.160 In4

Yeah, I experimented with non designers, but my initial instinct was ... I'm a massive fan of industrial designers and I think industrial designers really underrate their skills. They tend to focus too much on the tangible skills, the sketching, the CAD renderings, all that kind of stuff, the beautiful details or whatever. And I think we've got an amazing... good industrial designers, they've got an amazing kind of ability to really work across the silos and synthesize things together into something practical. So I'm a massive fan of that. And I used to stick with that, and then I got encouraged to, particularly when you know after the whole design thinking kind of bubble there were lots of very smart people who had been to Cambridge or Harvard or whatever that wanted to get into design and design strategy. So I tried a few of those people and it just really made it clear to me that, you know, just because someone's academically smart and interested in the topic doesn't mean they can synthesize and move things forward. I don't know if you know that that quote by Charles Eames, he said, you know, "my definition of design is the the best we can do by next Tuesday", you know, bringing things together into a sketch, a model, a mock up or whatever and move things forward rather than sit around debating all the different dimensions of the problem but not actually be able to move forward. So after a few experiments with very smart people from a mixture of sort of technical and sort of more social science backgrounds, I've gone back to just looking at hiring really smart designers and then showing them how to be a bit more strategic.

0:22:46.540 Valentin Bufler And then maybe using external experts sometimes?

0:22:51.280 In4 A lot. A lot, yeah, yeah.

0:22:53.830 Valentin Bufler

OK. And what kind of industrial design methods or tools would you then also still use in strategy?

0:23:3.130 In4 Umm. Of the classic executional ones. And I guess it's just the, you know, we still do brainstorming. Designers do use user experience maps. So we use experience maps. We use... I don't know if you call this design or design research but we still use personas and scenarios still. And we'll do real high level kind of... If it's around interfaces, we will do wireframing and if it's concept work, we'll do real top level kind of 2D almost line drawings, strokes, sketches. But then we tend to stop there basically. And then we'll also do sort of prototype testing. Things like that. But that's probably the overlap. We try not to go too far because we know that execution designers are much better than we are about that and we respect their expertise.

## 0:24:33.60 Valentin Bufler

Yeah. And what capabilities did you have to build then with those designers that you hired?

#### 0:24:39.680 In4

I think the first thing is the research skills, just understanding how to do research more rigorously. And attached to that is structuring problems, structuring data, and analyzing more rigorously. So I guess gathering and analyzing data more rigorously. That's an important one. And I think hovering up and taking a more C-suite perspective on things, though not more business skills and also just more kind of leadership perspective about thinking about their people, thinking about their teams. And I think another one is just strategic storytelling about how to thread together a strategic argument. Because you're synthesizing lots of different types of information together, often you know, so you'll be bringing together you know, let's say brand strategy, consumer data, market data, a strategic kernel of an idea, taking that up to a vision, bringing that down to values and principles... I think that one of the most important ones is how to thread together. The strategic story and how to then articulate that, how to communicate that in an engaging way. I think that would probably be the ones that spring to mind.

## 0:26:40.320 Valentin Bufler

Yeah. And what would then be a typical strategic challenge a client has for you? Is there such a thing as a typical challenge?

## 0:26:55.210 In4

There isn't a typical one, to be frank. But if I give you some types, so in no particular order, sometimes we'll be doing some work with a design team to develop a new vision or strategy for the team itself. So there might have been a reorganization in the company and the company might have been taken over or there might be a new company strategy that they need to adjust to or quite often and we've had guite a few times where the CEO has told the design director "I want you to play a more strategic role in the company". So then there's various things about, well, we'll work with the design director and their leadership team to develop a sort of internal strategy for that team and figure out how they're going to execute on that, what capabilities they're missing, things like that. That's one type of project. Like, for example, at the moment, just one live example of that which is resulting in some training, is that I'm working with a sort of chief design officer and he's got responsibility for design and branding and some responsibility for innovation. But I think that mainly lies with engineering and R&D. And he wants to bring the designers more into the innovation process because he's seeing innovation consultants do a pretty bad and expensive job inside the company. So I'm helping that design team. I'm helping him select the right people who could be innovation consultants outside traditional design projects. So it would be tackling a range of different problems within the company, but not designing products. It's helping select those people and helping train them up in internal consultancy skills and then develop an internal consulting proposition that they can then sort of sell to stakeholders in the company. So that's just an example of that one.

We also do work right at the beginning of a strategic project. So I'm doing a project at the moment with a big company where they - I won't go into the details, but they've got to... they want to cut their carbon footprint by 25%. And that means they've got to radically change a particular product. They can't. And there's a particular product in their portfolio that is responsible for a lot of their carbon footprint and there's something in the nature of this product that is inherently quite wasteful, and they're gonna have to completely change it. And that's gonna change the experience for their consumers. And it's a really high risk, important strategic project and they asked us to help them frame the problem, unpack the different dimensions and tensions within the problem because it's highly

constrained problem and then come up with a vision or what they call the manifesto for it and some starter ideas to kick off the ideation. So we've come up with some outline concepts, but the most important part of it is a kind of very ambitious kind of vision statement that is both facing the design and innovation team that gives them a bit of a North star to guide their ideation work, but also it's to communicate to the senior executives what this project's about. So that's kind of providing a sort of strategic frontend for big strategic new product development projects.

Related to that we'll also get involved in planning new portfolios or lines of portfolios, for example. So that won't be so much around an individual product, it will be say, you know what, we're gonna move into this new category and how should we position ourselves in that category, what should be the product road map over the next five years for that category and things like that. So that'll be kind of portfolio planning.

Related to that, going back to what I mentioned before, around experience strategy we will also get involved in projects where, for whatever reason, the portfolio has become or is incoherent, inconsistent. It doesn't look and feel like it comes from the same head and hands, if you like, and that might be because it's just been badly managed, or it might be because a company is being acquired and needs to be integrated into the bigger company and that design language and things like that. So we'll do that, we call it experience strategy, other people call it design language or design identity strategy. So we typically do some analysis, come up with a vision and some principles, often you know Co-created with their design team. So they're happy with it. And then that would be taken on by the design team to help as kind of guide rails, if you like, to bring more coherence to their product range. And then I guess another type of work is where we'll be doin kind of foresight and potentially a consumer work, to spot new opportunities, you know ... "we need to grow, we need to spot new opportunities. Can you come up with some ideas about where we could focus, structure that into an opportunity framework. And maybe work with us through some workshops to define some propositions or design briefs that we can then work on." We'll probably do other stuff from that, but that would be a range of typical types of work that we do.

## 0:34:28.40 Valentin Bufler

Yeah. Are you also ever asked to go into real company strategy that it's kind of detached from design and yeah, basically the highest level.

0:34:41.670 In4

Yeah, we did. Excuse me. I'm. I've run out of water. Can I just go and get?

0:34:44.730 Valentin Bufler Yeah, of course, of course.

0:35:32.550 In4

Thank you.

Yeah. Company strategy. Yeah. So sometimes... so we did a project for Hyundai where we've been working with that chief design officer on some car projects. But Hyundai is a bit... It's a bit like Samsung. That's a huge conglomerate. And they've got a train company. That isn't doing particularly well, and they wanted a...

They brought in design to figure out... I designed strategy for the train company, but we ended up saying that this is much more than a design choice. It needs to be a complete repositioning of the company and because they had some hydrogen technology that was a potential real advantage in the destruction that's coming to trains and new energy sources and things. So we ended up presenting a company strategy to the board of this train company... You know, and it was enabled by design, but it ended up being escalated up to a new company strategy.

0:37:3.840 Valentin Bufler Yeah. OK.

0:37:5.190 In4

So that ended up being more like a, you know, more of a pure management consulting kind of project.

#### 0:37:14.810 Valentin Bufler

Yeah, because it's interesting that often designers that do strategic design are used for strategy around design. But, there is potentially, I think, also for strategy that is not that closely related to design.

And so it's good to hear that that is also used.

0:37:33.310 In4

Yeah.

Umm.

## 0:37:34.270 Valentin Bufler

And yeah, I think also because of the people that I talked to, a lot of them started with or after the design thinking craze. So I was wondering maybe how the demands of clients have changed over the times? Is there a difference too when you started?

#### 0:37:49.690 In4

Yeah, I was a big critic and still I'm a big critic of design thinking. You know, I thought it was bullshit.

# 0:37:56.710 Valentin Bufler

Yeah.

#### 0:37:56.590 In4

And but we're, weirdly, you know, lots of people think of us at Plan as design thinkers, because we're not designed doers. So we still get kind of bracketed as that. But I think the big thing that did change was that there was much more awareness of the general design thinking approach, and to be honest design thinking got merged into lean startup and all that kind of stuff as well. But that's the whole thing about.

Umm, you know? Prototyping, testing, early, having hypotheses, doing all that testing very very early. And that became very widespread across business and design was no longer pigeonholed as a... You know

our kind of agencies only being hired by design managers and design directors. And we got hired by new business or new proposition groups and things like that to help them with that work. So there was just more familiarity with our types of approaches across businesses. I think that was the big change. And a more openness in it and you know, design and creatives, were less kind of ghettoized into, you know, "oh, that's just what the design department does". No, what we feel comfortable in, brainstorming, workshop for it and you know, even though we're in marketing, we're comfortable, you know, doing some testing and things like that. So yeah, I think that that was the main impact I think, you know, I think largely, even though design thinking still seems to be shortened to MBA courses and things, I think for most people in the know it's not taken seriously anymore.

0:40:19.60 Valentin Bufler

No.

0:40:19.900 In4

Yeah.

## 0:40:20.760 Valentin Bufler

Yeah, definitely. I have that experience as well that it was used or it's looked favorably on as a way to get design into companies and taken seriously, but at the same time it's very much watered down. It's very much... I guess also in a way dumbed down.

## 0:40:39.780 In4

Yeah, it degrades the design discipline. To be frank, I think it still did some damage, yeah.

#### 0:40:50.360 Valentin Bufler

Yeah, exactly. I think a lot of people are now questioning "at what cost did we get into more of the business world?"

0:40:57.430 In4

Yeah.

#### 0:40:58.210 Valentin Bufler

Because if we, if we say also like everybody can be a designer, if they take a two day design thinking bootcamp then how valuable is it?

## 0:41:7.80 In4

Yeah, if you're interested, I wrote a few articles about it about 10-15 years ago when it first started and you know the point I made is that I went through a four year design degree in one of the top courses on the planet. And plenty of people went through that course who weren't competent designers. So the thought that you could do a sort of two day course and become a designer was ridiculous, you know?

## 0:41:38.290 Valentin Bufler

Yeah, yeah, It's it's. It is still very much in a way, craft based and practice based. Yeah, interesting.

And would you say that over the time your relationship with the clients changed or the way you work with them?

#### 0:42:1.20 In4

Yes, but how? Let's have to think about that one.

Well, I think one thing to say is that because when I started doing it, there weren't many people doing it, right? I think in the UK anyway, I think I was the 1st ... I was quite the first strategy team in a consultancy. There might be strategists. I think it started in the US so I think you had people at IDEO in the US, frog, probably Ziba, you know, you probably had ... Doblin, but in the UK - I have less of a feel for the rest of Europe — but I don't think there's much going on in consultancies, in the, in the late 90s. And so it was a bit of a... so, I was primarily hired by design directors. And it was a bit of an experiment. I think they didn't really know. I was almost... I was slightly making up as I went along and they didn't know any better. They were interested to see how this could help them. And I think they were particularly interested in how — and it's still the case, to be honest — I often help design directors pitch credibly to senior executives. But now there's a lot more awareness of different types of strategic projects and strategic tools and things like that. So I'm working with clients who have got... Who are more schooled in strategy and have more specific requests sometimes rather than just a high level goal, and they might define some of the things about the approach they would like to see. Well, that would be less the case 20 years ago. So one of the first big projects I did at Seymour Powell was with Samsung. And it was like, "right, we need to develop a design strategy for entering Europe" because at the time Samsung weren't in Europe with mobile phones. So I helped them come up with a European approach, European design language and European strategy. And they didn't define how they wanted that done at all. Well, I think if they came now, it'd be a more detailed brief: "We want you to do this, we want you to do that." You know, there would still be flexibility about how to design the process, but there's definitely a more knowledgeable client right now.

# 0:45:28.980 Valentin Bufler

Do you also have a chance to have more long term relationships, especially working relationships, with clients? Or is everything still really project based?

## 0:45:38.320 In4

It's still project based, but I mean I've been working for Samsung for 20 years, 25 years? 23 years! But, most clients, because there isn't that... You know if you're doing executional work, you know the projects can run for years. And there's another project and you can be working with a client. You know, you're on the phone with them most weeks sort of thing. And with strategic work, you'll be often on the

phone... clients work in different ways, but with some clients who want to be very hands on you can be on the phone to them, you know, every week for the length of the project. But then you know you'll just stay in touch with them after that and hope that there'll be more projects on the way. But I very rarely have relationships with clients where, you know, even in between projects they want strategic counseling and things like that. That sometimes happens, but it tends to be... they're focusing on execution more after that point.

#### 0:46:59.210 Valentin Bufler

Yeah, because I do know some voices who see strategy as a way of constantly adapting and therefore argue that it's not really possible to have an outside consultancy do really good strategy work, because it should be within a company and constantly evolving. But I also think a lot of companies still do once in a while strategy and then execute and it's much more a back and forth between strategy formulation and strategy execution.

## 0:47:32.790 In4

But I think just on that, I think what we try, is to encourage our clients to own the strategy. So what we see ourselves as is a strategic support rather than "hey you outsource your strategy to us and we'll deliver your strategy". So sometimes they need... they just haven't got the time or headspace to do it even if they could do it, but often they also know that they need that external perspective and use us as a sounding board. But then co-create the strategy with them. So they'll still have that ownership of it.

#### 0:48:14.700 Valentin Bufler

Yeah. So is it also the difference in the size of the client that influences that?

#### 0:48:23.320 In4

I mean we tend to work for just big companies. What we do have some sort of smaller I guess clients but... I don't know... I don't have a good answer to that one.

## 0:48:41.610 Valentin Bufler

OK, interesting. Yeah, because I noticed that a lot of other industrial "execution" studios tend to work a lot with startups and SME's, because there the strategy... they can much more play a singular role, a singular voice because the capacity within the company isn't really there. And they found kind of a way to also have more long term relationships there, it's a constant back and forth. Especially with startups some also tend to find new revenue models that they may become shareholders or part of the startup. But yeah, it's interesting that you have basically only large companies as clients. 0:49:29.520 In4

Yeah, I mean, I'll be interested in the real story behind what you've heard there, because most... Well, in my experience, most startups have very little budget for consultancies and they also tend to be founded around a vision. You know, that the founder has a vision or the founders have a vision and you know they...

The whole business is around validating, testing and validating that vision. So they don't often need a lot of strategy until they start scaling up, or looking for a set, you know, they maybe got one successful product and they're looking to grow and you've got more of a scale up going, but I know so many different consultants who have tried working with startups, and all they offer is equity and all the rest of it... very, very rarely... It might be fun, it might be good for learning, but I'm not sure that many consultancies... I mean, I happen to know one strategic consultancy, they're kind of designers but they're more management consultants who focus on startups. But it's very much around, you know, running workshops with them about how to position, how to organize for the next funding round, all that kind of stuff. And it's very, you know, they've almost productized their offer because they cycle through so many startups, they've got a workshop for this and a workshop for that and various tools. They can do very quick hits, consulting, but, you know, they have to go through a high volume of startups because the individual startups haven't got enough budget to maintain a long term relationship with them.

#### 0:51:52.270 Valentin Bufler

Yeah, yeah, I think it wasn't a sole focus at the studio that I talked to. It was also more experimentation of making their business model more flexible. And they were mainly focused on the micro mobility sector and it felt like there were people having ideas but not really a background in product development maybe and therefore they came to them just because they saw now opportunities with, for example, all the e-scooter and electronic mobility, especially in a Netherlands. I think it's also a huge topic, all these last mile delivery and all these things, so it's definitely not a not a whole focus because I think, yeah, it's a gamble with the equity.

#### 0:52:38.790 In4

Yeah, but it's fun and you can learn and transfer that learning to bigger clients and things, yeah.

#### 0:52:48.680 Valentin Bufler

All right. I think my questions are at an end but before we are ending this interview: Do you have any questions or remarks that we didn't touch upon?

#### 0:53:05 In4

Remind me again: the purpose of your thesis is to... can you articulate it again?

#### 0:53:13.40 Valentin Bufler

Yeah. So I'm basically trying to as from a personal perspective, I'm trying to connect my bachelors education with my master's education. And I noticed that a lot of more traditional industrial design studios are struggling for a while now, but also very established studios and a lot of them are starting to branch into strategic design or at least position themselves in a way where I personally would argue they're just making visible what industrial designers have been doing for quite a while that they maybe question a brief or reposition something, reframe something. Umm and I mean this masters here's relatively young still, about 10 years and it's still very much trying to figure out what strategic design is. And it's also very much focused on larger agencies or consultancies and in-house design teams. And my interest was now to see where maybe the qualities and work methods of industrial designers and smaller studios, that are maybe more flexible, can connect to a strategic design practice and maybe become therefore more interesting for clients again if they also offer more of a holistic package let's say.

But also vice versa, what can industrial design offices learn from strategic designers? And kind of, yeah, fertilized each field a bit more.

# 0:54:39.400 In4

Yeah. No I think we, I think we've covered it. But if I think of anything else, I'll drop you a line, yeah.

## 0:54:47.70 Valentin Bufler

That would be great, yeah.

## 0:54:48.390 In4

Yeah. And do you send me your thesis? So I'll be interested to read it. Yeah.

# 0:54:51.670 Valentin Bufler

Yeah, I will do that.

# 0:54:53.480 In4

Yeah.

Yeah.

## 0:54:54.210 Valentin Bufler

Then I'll just remind you of the consent form, if you could send me that. So that would be great.

## 0:54:59.40 In4

Yeah, I'll do that now.

#### 0:55:1.700 Valentin Bufler

And thank you so much for the talk. It was very interesting.

# 0:55:4.820 In4

OK. Can I ask how you came across me? Was it that someone mentioned it or did you see something I wrote?

#### 0:55:12.130 Valentin Bufler

Umm, no, it's just desk research about strategic design agencies. Yeah.

#### 0:55:17.740 In4

OK, cool. Great. I'll. I'll send you the form over right now.

0:55:22.370 Valentin Bufler Yeah. Thanks so much.

0:55:23.580 In4 But all the best with that.

0:55:25.500 Valentin Bufler Thank you. Have a good day.

# Interview 5

# 0:0:0.0 In5

Well, my name is \*\*\*\*\*. I'm one of the owners of NPK design. Currently we have 3 owners, three partners as we call them. I've been working here for 34 years... almost. Before that, I spent some time at Phillips design. I was trained as a designer at the faculty in Delft, industrial design and at the design Academy Eindhoven. You might know me from that I worked at the TU for a couple of years as a professor, colleague of Giulia. So much for myself.

NPK design in general: NPK design has been around for... This year we celebrate our 45th anniversary after summer. It was founded by three gentlemen N, P and K, Ninaber, Peters, Krouwel. Also an interesting background, two of them studied in Delft, were Masters of Science as you call them and the other one, the third one, Bruno Ninaber, you might have heard his name, met him at some point. He was also a professor in Delft. He had a background from art school. And I think that combination of backgrounds form the basis of NPK design.

So there was a, you could say, an integration of Design as form giving and a technical background and also, that's probably the Delft background, a bit of business. And NPK basically flourishes on that mix of making as we say, nice good looking products, engineered to a certain quality level and also ready for production, to get things right into production. I think nowadays you would call that a full service office where basically you can come in with a good idea and a bag of money. And leave with a... I get a product supplied. We have a strong focus on products, hardcore products in that sense. We also do some strategic advising, but the core is product design. Build up of the office: I think we were 50/50 now, half designers, half engineers, with some disciplines on the side, with some graphic design, photography, lots of prototyping, model making... Basically, anything that you would need to develop a product in the widest sense.

## 0:2:56.370 Valentin Bufler

And how many people are working right now in the office?

#### 0:2:58.820 In5

I think currently we're 27 or 28 I think in total. I must say that nowadays it doesn't feel that full because a lot of people work from home, partly, because the office is... if you walk in the office usually it's half empty.

Lots of desks but empty.

## 0:3:24.790 Valentin Bufler

And when you say hardcore product, what is kind of your target client?

## 0:3:31.520 In5

Well, it differs, we worked for large corporations, international/multinationals... Heineken, ASML, Kimberly-Clark, Kraft Heinz, the big Ones, but also for very small ones, startups, single person companies and... I think, if you would analyze the client group, you would probably see that the midsection is missing. And the reason for that is that usually we're at the core of the product development, which basically means that there is no client internal development party involved. So either the big corporations that outsource the development completely to us or the small ones that don't even know how to do it, and for that reason end up with us. I think we're at our best if we take over responsibility for a certain development, so not just take on a part of it. But really take on responsibility. That's how we usually work. By doing so, we also limit ourselves. For example, we do mainly mechanical stuff. We don't do electronics development and we don't do software development. The reason for that is that we've learned from the past that if you do something, you have to do it really well. You can't do electronics development with two electronics developers in the company. You know, then you simply lack the expertise and the same goes for software. So we chose to focus on the hardcore mechanical stuff maybe.

# 0:5:23.180 Valentin Bufler

And did that change over the years, what your clients were?

## 0:5:32.250 In5

It's a good question.

Let me check how much I'm sorry because I'm in the wrong room. I'll check. Yeah.

Start walking, sorry.

0:5:40.30 Valentin Bufler

OK.

0:5:46.100 In5 Kind of a meeting room. OK, OK, they'll say sorry.

Lack of meeting rooms

...Did that change over time? Yes, I think it did because from the past we know that in the early days there was no integrated product development and also not at companies. When I started off as Phillips, we had completely separate departments. It was a design department, and an engineering department, a production department... I mean, we now know that that has become much more integrated. So these boundaries have somehow disappeared. There's not a big difference anymore between a designer and an engineer. You know, it's it's too... It's overlapping more or less. The consequence of that is that with each new client, we have to figure out where the overlap point is and how to manage that. And that's become, I think that's become part of our business to find out rather quickly who does what and who's good at what, and how do we divide tasks. It's part of the business. But what also has changed overtime I think is — I think that's probably also your interest — the strategic role that designers play in that process. Because at the beginning, at least when I started here, a designer was seen as somebody who would draw something beautiful. Make it look nice. In most companies, at least. And nowadays we've seen that design has changed roles, the position of

design has changed and that designers are actually involved in many stages in the process. It depends of course a little bit on the qualities of the designer. We still have designers that only make nice sketches and are not interested in the process or in the strategic element of it. But overall, I would say that the role that design plays in development has changed significantly.

0:8:14.960 Valentin Bufler

Could you tell me about an example where a client had a strategic challenge for you?

0:8:17 In5

[thinks, then laughs] ...Without naming...

0:8:27.120 Valentin Bufler [laughs] Exactly.

0:8:28 In5

No. Well it has changed. And I remember that when I was first seriously, significantly involved in the strategic aspect was in the early 00s. So let's say 20 years ago. With clients that were thinking about how to restructure their portfolio. So that was the initial thought of "How can you basically as a designer get involved in that product development"? Nowadays it's got more to do with changes in the environment. For example, I can tell you something. We would do a lot of projects for Kraft Heinz, the Tomato Ketchup Company for example, and where you see that they run into problems, for example in the field of sustainability where they produce a lot of waste, plastic waste, and they somehow have to find solutions for dealing with changes in legislation. And they don't know how, which basically means that a project for such a client starts in a very different way than a classical product development definition where they say, "OK, design me a new coffee maker or design me a new production tool" or whatever.

So we see that from societal changes you end up with a new role for the design to play, simply because it's not a defined problem that you start working on, you start from changes in the environment that you have to deal, with without naming from the start what the solution will be or what kind of solution you will end up with. So sometimes it's a... I just had a meeting where I said, "OK, it's interesting that years ago, I was collaborating with a management consultancy. And they said that you can't do product innovation without change management in the company. Because product innovation always has an impact on the structure of a company. So there you can see that the role of design in that sense is changing a lot because what we do in many ways impacts the way that companies behave in their environment. Simply because we're not just making new products. But the kind of solutions that we're developing impact both the company, in its structure, and also influences the outside world simply because we come up with different solutions that haven't been out there yet. I think if you look over time, the role has significantly changed from solution... from a role where we make ready solutions, products, to, in the end still products because we are product makers, but products that have an impact both on the company side and on the societal side. Especially the last thing has, of course, a huge impact on how you behave as a designer.

0:12:2.850 Valentin Bufler

Yeah.

So if I understand it correctly, the context that you then investigate does not only influence the outcome of your process, but also what you're working on influences the context again.

0:12:17.370 In5

Yes, yes, definitely. It's interesting that, you see.. Do you know Erik Roscam Abbing?

0:12:25.810 Valentin Bufler Yeah. From live work, right?

0:12:26.780 In5

You probably might have met him at some point. I remember that I worked with him many years ago and he had an interesting model. I think it was not his graduation in Delft, he did the design

management master in... somewhere in the UK where you basically see that the design has that influence, that it changes the context. And the context changes design. So it's like a loop, like a Mobius loop that keeps going back and forth where both influence each other. It's not a static situation. For me that's one of the most interesting elements of design. The fact that you are able to actually change the context.

## 0:13:14.980 Valentin Bufler

Yeah, I agree. And also that you can use the product in that way and not just see it as a result of the context, but also as an, I guess actor within that context.

#### 0:13:25.220 In5

Exactly, exactly. It's a change agent, you could say. Yeah, yeah.

## 0:13:29.850 Valentin Bufler

Interesting and having to tackle these more strategic challenges, how did that challenge you as an industrial design practice? Did you have to build capabilities or?

## 0:13:41.700 In5

Yeah, we did. We started doing that at the end of the 90s, I guess it was, where we became aware that what we're offering needs a, let's say, theoretical background or or let's say a model that you work with. Because before that it was mainly... I recall it shooting from the hip. You know, you advise clients on the basis of experience without even knowing exactly what it is that you were offering. And I think in the late 90s, we became aware that we had something that was worthwhile communicating with our clients and also trying to sell to our clients. The selling part became difficult, we found out in the late 90s, early zeros. Because then design was still seen as the profession of making things look nice and not so much as a profession that could do strategic advice. So we had a hard time selling those capabilities, selling the fact that we actually had strategic insights and we were able to strategically support our clients.

But what we started doing then is start basically for ourselves, trying to make that knowledge that we had explicit. And the fact that we started working on that has actually taught us a lot, you know, I always say that, if you have to describe to somebody what you're doing in words, you have to be able to grasp it. Before that you do it intuitively. So the fact that we had to make things explicit actually helped us in making things sellable. Or to bring it across as a business proposition? If you're not even able to make it explicit, they're not able to sell it. So nowadays we've got tools and the tools have developed over time, of course of how that we use in that strategic consultancy towards our clients. But then again I'll say we're not hung up on tools. I can always say that for every client we invent a new tool, if necessary. There's always this tailor made stuff that's going on in a project. Context related.

## 0:16:24.820 Valentin Bufler

Yeah, but do you have a base structure?

## 0:16:27.500 In5

We have a base structure, we have ideas of how things should work, how they're meant to be, and on the basis of that basically for each client we develop something slightly different.

## 0:16:39.270 Valentin Bufler

Yeah. And you said now you're basically divided into designers and engineers with some other roles also.

## 0:16:45.690 In5

Yeah.

# 0:16:46.570 Valentin Bufler

Did you ever also look into hiring people from completely different fields, or was it always built from designers who maybe get some more capabilities in certain areas?

## 0:16:57.750 In5

Well, it depends on what you call different areas... for us at the start, hiring a strategic designer was a different area. [laughs] That would be somebody that would not be able to make a nice sketch. [laughs] OK, strategic designers of course, are capable of making nice sketches. But yeah, we did that. The problem is, the more specific you make roles or functions in a consultancy, the more difficult it gets to sell their time because basically what we do is a consultancy business, we sell hours. That's the main business model, apart from royalties and licenses and that kind of stuff, IP development... but still hours and the more specific you make it, the more difficult it gets to sell the hours or to get enough billable hours. That has always been a struggle. So our approach is more that we look for people that have multiple legs to stand on. I think in Delft they would at some point call it Pi-shaped. So you have a knowledge of design and something else. So we always look for that overlap. To see that somebody is a designer and at the same time as a background against something else. Could be a business background, could be a design management background, could be a production background. So we are always looking for that interesting combination of people that do both, that have an interest in both. Or in multiple things to make sure that if we don't have enough work in strategic consultancy that they are also good at designing an interesting physical product. That's also how we behave ourselves as owners, as partners of this company, we actually have the same approach. All three of us are designers from background. One of us folks is more on the financial side. One of us has a focus on the HR, human resources side. I have an interest in strategic stuff so we basically try to combine things, have people with multiple interests to cover different fields.

#### 0:19:38.840 Valentin Bufler

OK. Yeah. You just also touched on that and the business model probably changed also over the years or are you constantly experimenting with that? Also, as the clients are changing...

## 0:19:53.880 In5

Yeah, it has changed ... You know, it's like a wave. Originally it was like a pure — it's called hour factory, billable by the hour, but quite early on in the process since we were doing projects from start to end, we found ways of getting away from that hourly billing model to creating IP in different ways. And getting revenues from knowledge basically, or from IP that was built. Even up to the stage that we founded a production company ourselves. Because we knew that it's easier to make money from production than from selling hours. So we had a production company. And that influenced our thinking in the sense that we said, "OK, it doesn't matter where we make a margin, where we make profit on a project as long as there is profit in a project". Which could mean that we would do a development project almost for free. And then make a profit on the production. Uh or nowadays where we invest in IP or in licenses that we basically say OK the client pays less for the project, I don't know, 50% and the other 50% come back in a different route. Either because we own part of the company or we have a license deal or we have royalties or a producer pays us, you know? We're always looking for different models of dealing with that because it opens up a new field. For example, if you work with startups, usually they don't have the money to pay for the full development, so then how would you deal with it? So you wanna be rewarded for your work at some point, but it might be later on, later in time, which is not a problem. The reason why we could ... it is an interesting discussion, it's an interesting topic to discuss because over the years I've learned that many design consultancies would like to do an approach like this but are not capable of it simply because they lack the financial means to do so. Because basically, if you work in the billable hours model you usually get paid within a month or within two months after you've delivered the hours. And if you work in another way, where you go for IP or license is a royalty and stuff like that, you have to pre invest. It basically means that you have to be able to span a certain period of time without income. And many, especially smaller companies, lack that opportunity, that capability simply because they don't have the money to bridge one or two months. And that's something that, well, we've been around for 45 years, we've built up, let's say, enough financial strength to do so. We can postpone our revenues. Some projects take years before they give us the return on investment, which is fine because if you're in it for the long term, you get your money back. And at the same time it has supported our existence over time. Because if we go through a weak period or economic downturn usually the revenue keeps coming in. Because the investment was done earlier on. We never, let's say it in bookkeeping terms, activate our investments. So it has taken us through these decades without going bankrupt or going down the drain. We have a

big advantage, of course there because we own the company, we don't have external stakeholders, external financiers, banks, breathing in our necks. All we have is ours. We can decide whatever you want to do with it. Which makes it very easy to take on products, projects that have a different risk profile, for example. I must say that's a very... that's also what I enjoyed here over the decades. That gives you a lot of freedom. To not having to perform and deliver within a year or convince somebody that you know we have to spend money this year to earn back next year. We don't care. It's ours, so that adds a lot to the fun factor of working on these projects. Because we decide what to do. Nobody to report back to.

#### 0:25:20.440 Valentin Bufler

Yeah. And I guess also the diversity in clients, but also in revenue streams makes it a lot more stable in cases of hard times.

#### 0:25:29.310 In5

Definitely. Definitely because it's a question I get a lot from clients. So how are you capable, how are you able to at the same time work on beer bottles for Heineken and semiconductor machines for ASML? Or do outdoor/public furniture. Well, we're able to do so because we don't specialize in a specific product group.

0:25:59.620 Valentin Bufler Yeah.

0:26:1.180 In5 Valentin, you're German or Austrian or...?

0:26:3.690 Valentin Bufler Yes, German.

## 0:26:4.800 In5

German. For example, I know that in Germany you would have specific furniture designers. People that only do office furniture and work for a multitude of companies, but only focus on office furniture. We never did that. We never had a focus on any specific product category. We always, always say we were capable of designing almost everything. Because we do it in a structured way. Because we're able to actually collect a lot of information, relevant information, process it and turn it into a decent product design. That's what we do. So we don't have specific knowledge about chairs. Or I don't know, any kind of product... The process is the core of what we do. That's it. And you could say that's a very Delft approach. That the process is always leading. And with that process, we can design anything you like. That has helped us in diversifying the portfolio products that we worked on because you see that for example, we do a lot of work for cities and communalities. And the government, you know, some periods they have money, other periods, they don't have money, which is the project. It's always like this. [gestures a wave] You have a ... all of a sudden the government has money, then they spend money, then two years later the money's gone and then there's no projects anymore. What we do, because we focus on different product categories or don't have a specific product category, we try to balance it and there's always one product category that is flourishing while the other one is going down and that helps us to get through difficult times, because there's always something. And that to get that together with let's say the shifted revenue streams of royalties coming in and licenses coming in later basically helps you survive tough times.

# 0:28:9.970 Valentin Bufler

And now you just said that you also have public clients, not just private organizations. And is there a difference in how many strategic questions they have in comparison or are the projects fairly similar?

# 0:28:29.980 In5

I don't think you could divide them, let's say between public and commercial companies. On both sides you see strategic projects and nonstrategic projects. No, I can't say that one group has either more specific strategic challenges than the other, no.

0:28:57.430 Valentin Bufler

Yeah, interesting. Yeah.

And the relationship you have with the clients, are they fairly project based or you're trying to build long term?

#### 0:29:8.870 In5

That is also a good one. We had that discussion this morning, earlier on, while we were talking about our acquisition sales meeting. We have always focused on long term relationships with the clients, because we know that, you know, a client returning or coming back for another project is a simple catch, is an easy catch. It's far easier to make money on a project, on a client that returns than on a new client because there's always that initial phase where you have to find out, you know, how they work. But that strongly, strongly connected to the way we work. Because since we are owners of what we do, we don't have to report back so we can accept, and we do accept, overshoots in projects. But you might say from a pure project commercial perspective, it doesn't make sense. Why would you accept an overshoot on the project? Well, we accept the overshoot because we want to make sure that the client returns. And we don't have to spend money on acquiring a new client. So we have always focused on long term relationships and even if they initially ... if you get the impression that it will cost you money. Basically, we postpone the revenue moment. The return moment.

#### 0:30:45.630 Valentin Bufler

Yeah. I also heard from other interviews that I had that often the client relationship might start with a more product or execution based project and then later on it also goes into more strategic work once there is like a basis already built on like an understanding of the business and all that.

0:31:3.290 In5 Yes, definitely.

That's that's.
The.
I'll move out.
I'll go there, sorry.
20.

0:31:16.380 Valentin Bufler Or is.

0:31:21.30 In5

I was we were. I was sitting in the lunchroom, so.

0:31:23.750 Valentin Bufler This is.

0:31:26.460 In5

Use it when they are. They're not ready yet. Now. No, I don't have a room.

Uh.

Officers getting too small.

Alright.

That's an interesting one.

But.

Sorry.

And the data.

Ohh, I'd like meat. Sorry guys.

Yeah. On the red sofa now. Sorry.

OK, sorry. Where were we? Have to. Yeah, yeah, yeah.

#### 0:32:8.50 Valentin Bufler

And we were talking about the client relationship that starts more with project based and then transitions.

#### 0:32:17.610 In5

That's usually the route because, you know, our reputation is that we're a product design company. That's the basic reputation. So usually the relationship starts with a concrete product development. And then once they discover, once the clients discover that there's more knowledge that they can tap into, then usually it extends to a more strategic consultancy. Not always, but in some cases. Depends on what client needs. The other way around is more difficult for us. We've tried that in the past. Basically to enter at the strategic level and then continue into the more operational level. That's a difficult one. I think that has to do with our reputation.

## 0:33:6.200 Valentin Bufler

Do you feel that's also maybe a suspicion of clients that they question if designers can do strategy?

#### 0:33:15.370 In5

Definitely. Yeah, I think that's an image problem. Simply because if people think there's a cliche of a designer, what a designer is and what a designer does and the cliche is that it's like an artistic type of person, you know, working on his own, developing his own, his or her own ideas. And that's not so much embedded. That is also a very... not stubborn person. I don't know what would the right word would be...

Yeah, stubborn. I stick with it... stubborn in the sense that, you know, it's a quality as a designer that you have an idea of how things should be and you try to convince other people that that's the way the thing should be. As a strategic consultant I think you would probably assume that the person is less biased or less... preoccupied. So [with] a designer, you expect a strong opinion or statement. [With] a strategic consultant, you'd probably expect a non biased approach.

## 0:34:48.830 Valentin Bufler

And also maybe the rigorous analysis that you expect from a more traditionally trained business consultant?

## 0:34:57.10 In5

Yeah. Well, that's in that sense... rigorous analysis. That's something that we also do as a designer!

# 0:35:8.160 Valentin Bufler

Yeah, I think so too, yeah.

## 0:35:9.500 In5

Except it doesn't fit with the image of the designer.

## 0:35:13.10 Valentin Bufler

Exactly.

## 0:35:16.790 In5

And that's something that I think that's overtime changing since the profile of designers is changing over the years, more and more people get used to the fact that there's multiple types of designers and some of them are more strategic. And now that notion is developing. Uh, I think it gets more accepted.

## 0:35:40.430 Valentin Bufler

Yeah, I think also the general understanding of what a designer does and what a designer is.

0:35:44.140 In5

Yeah. Yeah, that is changing. Yeah, exactly.

0:35:48.580 Valentin Bufler

And how would you say that your industrial design background influences the way you approach strategic challenges?

0:35:59.240 In5

I think the difference is in how you apply creativity in that process. The fact that...

Right. I have to keep closing the door here.

Well, there's an interesting storyline... Have you ever heard of Kees Dorst?

0:36:29.900 Valentin Bufler Yes.

0:36:30.460 In5

Kees [Dorst] triggered me many years ago, and it's a sentence that I use *very* often, something that he calls the "Co-evolution of problem and solution space". And I think for me that's the core of design. Basically stepping back from that old paradigm, where we say: first you have to analyze until [you reach] very thorough analysis, and then you start developing the solution. That doesn't work. I think also in strategic challenges it doesn't make sense to analyze something to death and only then start working on a solution. It's, you know, it's the fact that you go back and forth and loop it and basically you're able to see the continuous development of that solution while discovering the problem. For me, that's the core of what we do. I think that's for me also the big difference between what strategic design consultants do and what strategic consultants do. I always, you know, if I talk about strategic consultants, say: OK, then they analyze the situation, they write a nice report and then that's it. That's where it ends and it never leads to something — or "never" is a big word — very often doesn't lead to a satisfactory solution simply because you cannot analyze without design and design without analyzing it. It's, you know, it's a loop.

# 0:38:17.510 Valentin Bufler

Yeah, you touched on something interesting here, which I'm also very interested in: The implementation of strategies. And since designers come from this implementation or execution background and the training basically is in the final stages of strategy execution. That knowledge, I think, is also very helpful in the strategy formulation. That you understand the end part and the implementation part.

0:38:43.330 In5

Yeah. Yeah, there's an interesting... There's a nice book. Maybe you know it. I only know the Dutch Title "strategie is executie".

0:38:54.60 Valentin Bufler Umm OK. Mm-hmm.

0:38:54.330 In5

...Strategy is execution. Have you heard of it? It's a... It's written...

0:38:57.400 Valentin Bufler I think I've heard of it? Yeah.

#### 0:38:59.140 In5

Yeah, it's written by a guy actually from a... he founded that strategic consultancy that I collaborated with many years ago, where... The core of this whole thing is actually what we were just discussing. You cannot do strategy without a notion of execution. So in that sense it... and design actually did it the other way around, coming from execution starting to get more involved in strategy simply because we know how execution works? But I think most strategic designers actually start from a classic design role. Probably you also have a design background. I think it's very difficult to get into strategic design without having a background in design. I'm just trying to think if I ever met a SPD student without a background in design, I might have, but it's a... It would be a rare breed.

## 0:40:17.700 Valentin Bufler

Yeah, from the people I know also... different areas of design, yes, but something with design always.

#### 0:40:24.600 In5

Yeah. And I think what was really important is that it's very difficult to design... to set up a new strategy if you don't know about the struggle of the implementation side of it. I think that's also where probably... If you meet strategic design consultants out there in the field, most of them have started somehow as a designer at some point, and then bring that knowledge, that practical experience, back into their own consultancy. As opposed to what I see with many of the management consultancies where the young people actually don't have a design background, they have a business background and have really a hard time imagining how things would end up in practice if they come up with new strategies. Simply because they haven't been there.

## 0:41:30.280 Valentin Bufler

Yeah, I think also then this... The people that maybe do have a different background come into it through design thinking, but I guess there is the big question: How successful can that be if you have a, I don't know, boot camp in design thinking.

## 0:41:46.280 In5

Exactly. I mean, the whole hype on design thinking of the last few years... I think it was overhyped in the sense that, you know, it felt like "Here's a nice simple tool that everybody can use". I really doubt it. If you don't have the background of the experience of being with your feet in the mud, design thinking doesn't make much sense.

# 0:42:12.490 Valentin Bufler

No, I think it was a selling tool and it worked nicely for that for a while, but... yeah.

## 0:42:18.740 In5

You know what it's good for? It's good for actually creating co-ownership within companies, you know, having people involved in developing new ideas and new solutions, that you create ownership somehow within the company by having these people involved. But it doesn't mean that they can actually build the solution or develop a solution.

## 0:42:44.110 Valentin Bufler

Yeah. Yeah. And also to install an understanding of the basis of design. What it means to be a designer and all that.

# 0:42:51.670 In5

Yeah, that relates back to what I said earlier on that there's a close relationship to design and change management. In this sense, design thinking relates also to change management. Preparing people within the company to accept your new direction, your new solutions, if they're involved. In Dutch I always say "maak ze medeplichtig" ["make them complicit"], "make them an accomplice in the crime", you know, if they feel responsible for the result, then it's much more likely that they will accept it and help implement it.

#### 0:43:27.800 -Valentin Bufler

Yeah. And then the other way around, working more on the strategic challenges, does that also influence how you approach industrial design projects?

## 0:43:35.920 In5

Yeah, definitely. Because I've seen that... But that is mainly on the senior level here that the more you have people involved in strategic challenges, the more aware they are in the practical implementation of design solutions, for example, the whole thing of... it's not really, not directly strategic, but the business modeling.

The fact that there's a much higher awareness of... that it makes sense to model your business has a huge impact on the solutions that come out. For example, I would say if you don't know as a designer what the costs are of what you're designing you're not a good designer. For example, if you design something, it's... I always say it's very easy to design something that looks nice. Very easy! That's the easiest thing. The hard thing lies in actually getting that nice design, that nice looking thing, into production, against affordable costs and against the price level so that people out there are willing to buy it. So the effect of — and that's again strategy and execution — the impact of business decisions on the design process are huge and many designers are not aware of it. They think the design is just about making beautiful things.

But it's making things against a reasonable price and with a reasonable investment and within a reasonable time. Otherwise, you don't have a good design. It doesn't make sense.

So in that sense it does — I think we train our designers here in thinking that way that they are always right from the start [aware of] what the business implications of their design decisions are. And that you cannot make a decent design without knowing what the implementation implications are.

## 0:45:56.100 Valentin Bufler

Yeah. Yeah. With that, I also understand very well that designers wanna be part of those business decisions because they are the ones who have to deal with them.

## 0:46:4.670 In5

Exactly. Yeah, exactly. And it's also in that sense again that loop... Because also in business thinking it helps to come up with concepts and basically say: OK, we could solve it this way, but because they solve it that way. This solution means a 2,000,000 investment and this illusion means a 500,000 investment, but... you know, and then you can start saying: OK, now these are the knobs I'm gonna turn, the cords that I can pull to make things change. So the awareness of the effect of different concepts with different implications is actually something that we integrate in our design process. So it makes sense that you can actually go through these loops. If you are, let's say, an artist designer you only have "form design" or one solution then you cannot influence the cost side of it. So you have to be, as a designer, you have to be aware that there's there's things that you can change, that you can actually adjust your approach and adjust your design to meet the other goals.

# 0:47:32.560 Valentin Bufler

Yeah, I think that relates interestingly to something I see more and more pop up and that's an understanding of design as not being a solution providing profession that there is no solution basically to the problems that we face. Especially for, let's say, these strategic designers in more internal roles that have really long term engagement with an organization and a problem, that there's this understanding of "we don't solve things, we just change the problem. We maybe split it up, we maybe put it into a different department, but there is no such thing as really a solution". And I think that's also an interesting understanding that from the strategy side comes a little bit more into our trained minds of "we provide solutions".

## 0:48:17.720 In5

Well, yeah, but that also requires another approach from designers in the sense that I think you're absolutely right that in many cases there is no solution. Now if it was as simple as that, that would be really nice. But it's the context and the fact that you add things to the context changes the context, and then all of a sudden you cannot speak about a solution anymore because it's a continuous process.

# 0:48:41.430 Valentin Bufler Yeah, exactly.

#### 0:48:42.270 In5

And designers should be aware of their role in that process, that there's never an end goal. Also in my business here the artifact, the product, is never the end goal. It's a means to an end. Uh, and in best cases you solve most of the challenges, but you usually don't because you create new ones. And then I think that's also one of the most interesting elements of this profession. You know, it never ends. [laughs] Your never done.

## 0:49:16.930 Valentin Bufler

And of course, we need the and of course we need to find sometimes an endpoint to a project or to a deadline or whatever, but also with the understanding that it's not necessarily an endpoint to this journey of solving this problem.

#### 0:49:30.860 In5

No, but that's also interesting, because that also relates back to these long lasting relationships with this clients because it is usually... OK, if the simple thing is that you design a new product. Then, in many cases, it's just one product of the portfolio of the client. And there are 99 other products in the portfolio. So you're only done once, the other 99 have also probably been redesigned, not for the sake of redesigning them, but simply because you started changing something and then the rest has to follow, and probably also has to change. And if you can have that strategic discussion with clients about, "OK, look, we're now focusing on that one single product, but you are aware of course that once we start changing your portfolio that the whole thing will change". And then you're in a strategic discussion. And then automatically you run into the next problem and the next challenge and the next type of discussion.

## 0:50:34.930 Valentin Bufler

Yeah. And then we are again at this interesting thing with the context determining what the object will be or the output. But at the same time, this relationship... similar to the problem and solution space that Co develops.

## 0:50:47.870 In5

Yeah. And that's the same, not not only focusing on the product or the tangible, the artifact, but also on the collaboration with companies. And that's then more on a strategic level because once you set that process in motion of change within a company then you're never done, it's never finished. The problem is usually not solved with one... What do you call it? Interference or interaction or what? I can't find the right word... but with one *action*. Usually there's a whole lineup of things that have to follow. You set a change in motion and usually you cannot stop.

# 0:51:31.880 Valentin Bufler

Yeah.

Maybe one last thing. I sometimes also stumbled upon this notion that organizations kind of settle into a certain way of doing things to become more stable, to become more successful with what they are doing and therefore they become kind of... I guess defensive towards change, but as a strategic consultant you wanna stimulate change? How is that battle between this process of becoming stable and I guess defensive to change and trying to bring change to it.

# 0:52:11.460 In5

Yeah, you know again one of those models that I use a lot in the interaction with my clients... I always say it's like a process of... a normal design process is where you start with everything's possible. And it's diverging - converging. You know that whole thing. And a similar thing you see in the allows of freedom that you allow yourself as a company. And the challenge is usually to find the optimum there. And that's not a stable point. But every company struggles with that: to find that right balance point. But it's not like you can find that point and say OK, now it's done, now we're fixed, now we have the optimal. It's continuously changing. How do we deal with that? I think we're in the pleasant role... We

have this consultancy, we're external consultants. So we're usually asked to shake things up. Because it's, uh, I would say that it's an incident, they invite us for an incident. Even if it's long term relationships we do have peaks of involvement. And during those peaks, it's our role to stir things up. To actually bring things out of balance, because you wanna create a new situation. But I think it's a very natural process within companies that you try to find... That's the second phase, there's that stage where you see that everything is possible. And bit by bit, you're making things like less liquid. And you do that simply because that first stage of being able to shake things up is not a very efficient one. It's not the most efficient process, it's efficient to create new options, but financially, usually it's not a very efficient way of doing things, so companies automatically then after that initial peak of, let's say, freedom, they have to settle down. They have to return to standardization, procedural approaches, to optimize their margin in this process. Which is a very normal process. And of course within companies, we see that... you know, the time is usually off. You know, they started looking for a "freedom to move" too late. Because they know that they're losing market share, you know, there's always some external reason why they have to start moving and the other way around too. We also see that that search process also usually takes too long. Simply because they didn't find the right moment in time to shake things up or to redefine things. So there's always that slight disbalance between freeing up and fixing things in procedures. It's always the same. You see, you learn to live with it. And probably also for us it's a reason why we exist. Because if everything would be in the right order, they wouldn't need external consultants to bring in some fresh blood and to shake things up. And so I guess it's part of our role.

It's also an interesting character trade of designers, I think we incorporated it. I was involved in the bachelor revision over the last couple of years in Delft. Being able to deal with insecurity. It is a quality that designers have in this whole process and that a lot of people, non-designers, have a hard time with, you know, excepting that you can never put things in strict procedures, predict what's gonna happen and being able to live with that. We as designers have that specific quality that we can sleep well at night while still not having solved the complete problem. Most people can't do that. [laughs]

0:57:20.30 Valentin Bufler Yeah. That's a nice final word. And before we come to an end, did you have any questions for me?

0:57:27.960 In5
Did this answer all your questions?

0:57:31.500 Valentin Bufler
It did answer all the questions I had written down.

0:57:36.480 In5 Good.

## 0:57:37.610 Valentin Bufler

But I think it's also very interesting when we have these conversations that it becomes more of a conversation and it's not just a checking off questions, but it definitely... It helped me narrow it down, what does this dual role of designers *can* be now going forward because... yeah, my background is in product and process design, so a much more traditional industrial design I would say, but I noticed that a lot of people who have very well established offices were struggling and that was one of the reasons why I went into strategic design. And now it's kind of, I guess this work is about bringing these two fields together, more on a general basis, but also what that could mean for me and my own work. And I think especially since you do have this long tradition already within the company, and you were able to make these changes, I think it was very interesting insights.

I recently also spoke to someone who is doing much more work only on the strategic side and they are very much struggling right now because of COVID and also another looming recession. That strategic work is basically the first thing that gets cut.

#### 0:59:2.130 Valentin Bufler

And that was an interesting insect because for me it was more this strategy being a way out of not having work, but now it's that strategy is basically the first thing that goes again.

#### 0:59:14.60 In5

Well, The thing is what we've learned is that when we started, when we tried selling strategy as a separate thing in the early zeros it didn't work. And now it works because we embedded it in our normal process. We don't sell strategy or strategic advice as a separate activity; it's part of almost every project that we do and that makes it a lot easier to sell our services because, well you notice it, strategy is the first thing that goes out. Because it's very intangible. You know, business doesn't stop if you don't focus on strategy. Over time it will! But it doesn't have an immediate impact.

So our solution is to basically embed the whole strategy stuff into our normal design process. We also don't sell strategy independently. I tried to do so. We're not trying anymore, because again, for us it makes much more sense to embed it in a bigger process where we can say, OK, let's spend... I usually say: You know, the start of the project, I don't need a contract. I don't need a purchase order. I'm not gonna invoice you right from the start. Because what's much more beneficial to me in a project is a good definition of what we're gonna do and a good understanding of what we're gonna do and commitment to what we're gonna do. And if I have to spend one or two or three weeks of work on that topic, it pays back in the end. So I don't I don't charge for strategy. Strategy for me is alignment with the client and that alignment pays back later on.

## 1:1:20.480 Valentin Bufler

Yeah.

Yeah. Interestingly, I feel at the TU Delft, in this master's program, we learn not really about these more small to midsize consultancies and what they do. I feel the strategic design master is very much oriented towards either internal in large multinationals or in larger consultancies.

## 1:1:44.260 In5

I totally agree, and that and that's a bit of the downside of it. But let's say if you look at theory about design management, design strategy, all that kind of stuff, it's usually focusing on the large corporations.

And that's a pity, because I think a large part of the work is going on in SMEs. And they work in a very different way. So I think that in that sense, the topic is very relevant. I only wonder, and maybe you're gonna clarify on that, if there is a general approach there, if you can discover patterns in in how companies actually deal with this?

# 1:2:28.290 Valentin Bufler

Umm, I think so far, from the design studies I talked to, often the strategy feels to me like, it's basically what industrial designers have been doing for a long time, questioning a brief, maybe reframing something, but they're talking about it differently now. They're positioning themselves in a way that they actually do this. They market it, but it's not necessarily... it's not strategic design really at the high level strategy, it's very much still connected to products and product portfolios. And I think it's not really... It's not reinventing the wheel. It's just being open about it and marketing it in that way.

# 1:3:8.930 In5

Definitely. Yeah, exactly. It's not reinventing the wheel. I think nowadays we have more tools and methods that we can use. There's much more standardization there going on, also to facilitate the discussion between clients and designers, or strategic designers. The fact that we have a shared vocabulary helps.

I think in that sense the whole development, most of the development on strategy and design has been about — like we started off this discussion, this this talk — being able to communicate about things and name things make them explicit. The trade in itself, the design trade hasn't changed that much. If you look at how design consultancies in the past were operating it was very similar, you know

the famous frog design, the most famous one in Germany, Hartmut Esslinger, he was a strategic designer right from the start, except that in those days they didn't name it strategic design or strategy. He just did it from a gut feeling, and maybe from some things that he learned somewhere else. So in a sense, what the most successful designers in the past have been doing was already strategic design or design strategy, except that they didn't name it that way.

1:4:45.280 Valentin Bufler

Yeah.

Yeah. And I think it's.

It's good that there is this conversation, but still I think now the problem is a little bit more that some consultancies are struggling because so many companies have internal teams now or because traditional business consultancies are buying smaller design studios. There's much more of this situation, that the work is maybe there now, but either it's been done in the large internationals, if they have enough money to do that or that, it's these bigger consultancies who wanna also have some design capabilities.

#### 1:5:25.60In5

Yeah, what I find challenging lately — I think that's also a topic that hasn't been looked upon a lot — is how the collaboration is going on, let's say, between my size companies and the bigger corporations that have internal design departments. Where basically you see that there's designers on both sides. How they would interact and how they come to a division of tasks. For example, we do a lot of work for Heineken. Heineken has an excellent design manager, Mark Van Iterson, trained and educated in Delft... so they develop strategies internally, but they also work with external companies and somehow they're trying to find an approach in which they both worlds meet and where they have the best of both worlds. For me, that's a relatively new challenge. Relatively new, because either, like I said before, either we work for the large corporations, then the strategy for some part has been defined already. So you work within a defined strategy or you work with startups that I don't have a strategy to just shoot from the hip. But the field in between where there's actually actual collaboration going on where you can find the best of both worlds, that's a relatively new territory. How do you then work?

1:6:56.960 Valentin Bufler Yeah. Yeah. Good question.

1:7:5.780 In5 You'll find that in due time.

1:7:6.920 Valentin Bufler Yeah, yeah.

## 1:7:9.980 In5

Valentin, maybe one more last question towards you. What do you do? I always ask my students in Delft, what do you think you're gonna end up with? Again, you know, I always ask that in every design project, I ask that to my designers: What do you think is the end result?

## 1:7:28.570 Valentin Bufler

And that's a good question. Yeah, I think well, it's a bit strange from my personal approach, and what I learnt in my bachelors is... also here at Delft you need to hand in basically what you're gonna deliver with your project brief...

1:7:41.140 In5 Yeah. Yeah, it's weird, isn't it?

1:7:43.170 Valentin Bufler

Even though they know that's going to change.

## 1:7:45.30 In5

Yeah, that's the contradiction. You know, we teach our students that you know that co-development, that co-evolution, and at the same time you ask them: at the end of the project what's their feeling what they're gonna deliver, which is the linear approach... Anyway, Yeah.

## 1:8:1.770 Valentin Bufler

And of course, that's changed by now. I think it's going to be in a direction where it's a bit about a... It's a playbook in that direction where it's about different steps that companies or design practices can do if they want to change in a way that, I guess, expands their capabilities to that strategic design. So that has maybe a little bit of an analysis phase and then deepen industrial design knowledge that is still relevant and that is helpful also for strategy and at the same time expand the knowledge, kind of stretching a bit the areas, I guess, in which you wanna work in. I also think that design studios do need to be a little bit more involved, and I guess these bigger challenges, these more contextual challenges, not necessarily in the sense that they need to "find solutions for climate change", but just in the sense that they have an understanding that what they produce has an impact on the context, like what we talked about earlier this... how to say... yeah, it's interdependent. There is always a consequence of what you're doing. And that there needs to be an understanding for these complexities around it. And it also comes with the fact that the products, it's not just that our context becomes more complex or is perceived as more complex, but also the outputs that we have as designers are more complex. If you design, maybe, wooden furniture, it's very easy to understand where the material comes from and what happens with it afterwards and all that. But if we are designing especially like big things like you do with ASMR, these things have so many different systems behind it that we kind of need to have an understanding of these complexities that we also produce. And I think, yeah, there is kind of a change in positioning here.

#### 1:10:1.690 In5

Yeah. The challenge always lies in — also the topic that we talked about earlier — is the business model of design studios here, because it's very difficult to somehow get it financially right. If, as a small company, small to midsize company, somehow, you know, look ahead on the impact that you're gonna have with the stuff that you make and at the same time being able to just pay the rent and pay your people decently. That's a really... because designers do tend to take up a lot of responsibility. But if you actually look at the context that they work in, within smaller companies, it gets very difficult. Because you want to do good to the world and to society, but at the same time: Yeah, well, you still simply have to pay the rent.

1:10:54.50 Valentin Bufler

Yes.

1:10:55.10 In5

See, that's a very challenging... contradiction. The ambition level, yeah.

## 1:11:3.90 Valentin Bufler

Yeah, especially in the way you also see yourself, if you see yourself only as a service provider. Or if you do see yourself also as a, I guess, expert and consultant who has an opinion and who is asked to give an opinion? I think there's also a difference in the relationship you have with the client if you can establish that your opinion is valued as well and you're not just a service provider who does a brief and delivers a project in the end.

## 1:11:30.780 In5

Yeah, but still, maybe that's the classic situation in the market, you usually get paid... Most designers get paid by the hour. So there's no... So if you sell a product, usually the amount of profit you make, the margin you make, the more products you sell, the more margin you make. You don't need more people to do so. In our business, there's a very direct — still in most cases — very direct connection between people - hours - revenues. And that is very complicated because if you don't put somebody on to work

on a project that pays you got a problem. And a really relevant one, maybe you've worked in design consultancies in the past...?

#### 1:12:19.310 Valentin Bufler

Just in design studios, but not consultancies.

## 1:12:23.130 In5

Ok... The thing is that in this business the margin is thin. I always say... I think most design consultancies have a profit margin somewhere between 5 and 15%. Which basically means that if you have overshoots in projects, or a non billable hours, the profits are gone. You make a loss. So there's a very thin margin in which you can operate as a design studio before going bankrupt. So many cases of doing more than is asked from you leads to a financial loss. And that's challenging. That basically holds back a lot of designers in smaller companies to do things in a different way simply because they cannot afford to. There's no extra buffer created by, for example, successful products or selling more to the market or stuff like that. The competition is quite hard. You know, the hourly rates are more or less the same. Competition is on money. It's not that easy for a designer to actually jump out of the boundaries of the current business.

## 1:13:47.180 Valentin Bufler

Yeah. And I think that as a designer, you also need to be, I guess flexible and brave enough to experiment with your business model. And you need to have that understanding that you can do that and how to do that.

1:14:0.210 In5 Yeah, definitely.

#### 1:14:1.150 Valentin Bufler

Yeah, but since I don't really have a singular client, but it's more of a research project, I'm trying, like you said, to identify patterns and maybe then come up with something that is a bit generalizable. But yeah, that's definitely also the difficulty that it's not for one client and one very specific case. But this a more broader approach.

## 1:14:26.790 In5

Interesting topic, please keep me informed ... When is your...? What's your project look like, when are you going to finish? At which stage are you now?

## 1:14:36.330 Valentin Bufler

I am now after my midterm already and so I'm looking at early July for my graduation.

# 1:14:43.660 In5

OK, please let me know when and where you graduate.

1:14:47.820 Valentin Bufler

I will.

1:14:49.20 In5

I might come over and have a look.

1:14:50.490 Valentin Bufler Yeah. of course.

1:14:52.10 In5 Yeah

1:14:52.490 Valentin Bufler I will let you know.

1:14:53.780 In5

Great.

Good luck.

1:14:54.890 Valentin Bufler

Thank you so much for your time.

1:14:56.310 In5

You're welcome. OK, welcome.

1:14:58.370 Valentin Bufler

And see you.

1:15:0.10 In5

See you. Bye.

1:15:1.430 Valentin Bufler

Bye bye.

# Interview 6

0:0:0.0 Valentin Bufler

OK.

0:0:0.-230 In6

So I would need a little bit of, you know, like flags like I'm halfway now or just 10 more questions to go, things like that. So it's just for your idea that we both know where we are, but I will probably ask somewhere if it doesn't come.

0:0:18.520 Valentin Bufler

OK.

0:0:19.350 In6

OK. Thank you.

## 0:0:21.570 Valentin Bufler

Yeah, in general, it's also more of a semi structured interview. So I do have some questions, but it's also a little bit more of a conversation I guess.

0:0:28.640 In6

OK.

# 0:0:29.490 Valentin Bufler

Uh, maybe to start things off. Could you tell me a little bit about yourself, your background and what your practice does?

0:0:35.100 In6

OK.

Well, I have finished my studies of industrial design in Delft at your very institute in 1993. Or 1992, I'm not sure. 1993, I think... no 19... 1992. Yes, 1992. That's a long time ago. At the time, the challenges were a little bit similar to nowadays, like the climate and all those things. And I have been active... there was an economical situation that wasn't that good. There were not a lot of jobs. So if you wanted

to find a job you had to like apply... You would be one of the two hundreds. So I managed to apply for a job at Heineken, Beer, the R&D department and I think it was the second best out of over 100 people. So that was kind of the situation that we were in and then I decided to first just get some, you know, skills in things that I was interested in. So I stepped into the organization of the O2 event, which was held by Connie Booker, you probably know, and that was one of my [fellow] students and Elisa Bonkop [?] and a team around them. And I was part of the team and we organized an international event at Rotterdam and we required all sorts of famous designers from throughout the world, and this whole big event I have been working on for one year. In the meantime I was trying to get a job and do other things. So after two years I was kind of more like an event organizer than a designer and that's where I met In6A, my current partner who sits next there. I know... [to In6A] you can say hello, but you're not allowed to say things. I am the one who has to talk.

0:2:46.190 In6A Hello! [waves]

#### 0:2:48.200 In6

So we kind of met each other and he already started a company with some people you probably know, like Jelle Selstrow [?] who was also a teacher at your institute and Marike Sonnefeld, who was a professor in the meantime, so those were my peers. And In6A and me started to work together in 1993.

And then ... Yeah, 1994, I guess. And then we just, you know, we just did some projects together and then in 1995 we decided to move from Rotterdam to anywhere and it was like we took the map and we said let's go to the east and we're going to start and make a nice small design studio with the two of us and just try to get something running. And we had a part time job. He worked with Peter van de Veer [?], that's Veers Designers [?], which has now been transformed into Movis or Moving or I don't know. And I had a part time job. So that was kind of the surroundings that we started in and we just started to announce ourselves and it takes a little bit time to get some commissions and then after a year or two we had little assignments and it became more, more, more so we had clients and we did a lot of furniture. Furniture, a lot of furniture, tables, chairs, all sorts of things. You can see it on a website. So we had a nice, small company where we always had like one or two students around us to assist. It's very small. We always did the job ourselves. We never chose to become bigger. So our strategic choice was kind of being a niche and being small and doing things on our own. And not having a lot of people. It was a time when we thought we did it all the wrong way, but at a certain point we just decided this is what we like and we just keep it small, so we kept it small all the time. And that one went quite well actually.

And then the big 2008 dip came where the money bubble was plopped and somehow the clients managed to do some three years of continuous R&D with us, with them as a team. We had nice relations with a lot of companies like mobility and in the bath sector and in the furniture. But then in 2012, it was clear that also those companies had to, you know, tighten the belt and they had developed everything they could. And well, we are a small team and they had their own R&D department. So there is not much to do then. So it was kind of like what are we going to do now? We had no idea. Nothing's gonna come for next year. So. And then in the family there is a dentist. And we had this nice idea for a mirror that can be kept clean and we just simply thought, well, we have time because we have no commissions. We could make something of that and see if it works and if it works, it might be interesting to remodel our strategy and start a producing company and that's what we did. So in 2013, we had all the proof of principle that the idea was really going to work and we thought we had big chances then. Now we are sort of.. we know it was a little bit naive but it looked very promising and it takes a long time to realize things, we know now. But anyway, we wanted to jump in there. So kind of.. we invented a client, so we invented the company that was going to produce the product we designed and the studio is still there and it facilitates the company that's producing. Being us too. So it's kind of like having a lot of hats. So we're changing hats all the time and we have to learn a lot because we didn't know anything, nothing about sales. Nothing about how to do these things, but it was just interesting and we liked it and we did it. So that's what we do. And the fun thing is that at a certain point when you have a niche, you become known with everything in the niche. You become known with the products there, with the questions, with the problems of the users. So once you have this client that is producing the product, it's easy to shove in another product. So that's where the design

company can be the one that designs things and shoves it in with the client. And that's the strategy we try to follow. Being a small team is not really the best way to do that, but it's not very high demanding in money, so we just chose a very low profile strategy but with a lot of possibilities because the market we chose is a quite stable one. And they're very, very slow to convince the dentist. But once they like your product, they keep using it all the time. So that's the idea. If it works, you have a stable... and that's our idea. But this is a very short summary of our history.

0:8:32.450 Valentin Bufler

And do you still work with clients from other branches?

0:8:36.130 In6

In the beginning, yes.

0:8:40.830 Valentin Bufler

But, not right now anymore?

0:8:39.530 In6

But no, not right now. No, not really. A *bit*. Sometimes someone calls, but we don't really acquisite for the studio anymore because the studio is now our backbone for designing, so it's kind of like... our own home design company.

0:9:5.690 Valentin Bufler

Yeah, it's more like an internal design team, almost.

0:9:8.960 In6

Yeah, yeah, Yeah, That's effectively what it is. But on paper it is two different companies.

0:9:17.290 Valentin Bufler

And prior to 2012, were the clients more like the multinationals, so larger areas or smaller?

## 0:9:25.120 In6

Always MKB [SME], which is just a regular producing company like "Life Mobility", which is a company that has less than 100 people and they develop, they always have their own development departments. And what happened was once we had this client with this R&D department, they also hired engineers. And those engineers, after a few years, start work elsewhere, and then we came in there and then we saw people that had work and other clients. So we kind of had his network so that helps also to be connected to other clients. So it was like we were the external designers, the internal R&D was always doing the main technical things. But what we did was to work on the beginning of the project together with them, to build a technical concept with a design appearance in which they were to detail everything further.

0:10:39.490 Valentin Bufler

I see.

## 0:10:39.770 In6

And then after a while we came and then they had developed things and it's sometimes horrible to see... We have to repair everything and make it look nice again. And that was the way. So we were always put in for a quick project to make the route: This is where we're going to and always in cooperation with R&D, within the frame they wanted to have it. Sometimes we could poke and change things a bit and say, well, is that such a good idea, maybe this is also possible and then we would have a little bit of discussions and maybe sometimes disagreement but it was always with the idea that things can be better. So it was nice. It's like being a train beside another train and sometimes stepping in and something. Yeah, that's what a small team can do. And that's quite a lot. So it's really, really nice to... You do a lot of things and you don't have to organize all the people that detail the things. They do that themselves. It's good. We don't have to worry about it.

#### 0:11:48.40 Valentin Bufler

Yeah, I think it doesn't make sense to have an outside team giving those impulses and having maybe a fresh look on things to also inspire the internal teams.

#### 0:11:57.360 In6

Or we were used by someone internal that had an idea that they couldn't get through the management. So that was all... then we had... We were just doing the things they wanted and then showing it to the director. And he says "wow!" and then it's OK. It's always good to have an external person that helps you do that... It's kind of an interaction and it was fun. The downside of it was that In6A, not my problem, but In6A had a little bit of a personal issue. That sometimes he had an idea of how to create and really develop things to the very detail and then it would not be happy seeing the result after a while like "ohh why did they do that?" and that after 22 years for him was kind of a moment that he stopped having fun in doing what we did. So the idea to do something totally different and now having the chance to do everything by yourself beside everything, That was very, very interesting. So that's the kind of mental development that we got through.

#### 0:13:6.170 Valentin Bufler

It's interesting because with the other people I talked to so far, during that time of the early 2000s, they were very much in that detailing phase and in the more final execution part and later on they became more involved in that questioning, maybe a brief in a way or trying to give those outside impulses. But it seems like you guys were very much early on involved in those more strategic questions.

#### 0:13:33.570 In6

Yeah, I think so. But that's when you're small then you don't need to feed a lot of engineers. So I think – and it was also what also was in the background was the discussion of how and what tools you work with.

And in the very beginning, the design studios were the ones that had the CAD cams and the CAD tools that the clients didn't have. So either you were going to be a big design studio with all the CADs and all the engineers and saying I can do everything and then you could collect a big project, assign a lot of engineers and make it very big and earn a lot of money.

But also having a lot of costs. And we always worked on a Macintosh, we never wanted to change that. We had a few moments that we thought maybe we should do microstation, or maybe we should do this or that, and we never did that. We just kept on the Mac and part of that side was that we could not simply do what the others did because we didn't have the tools. And then there was a development that the clients themselves began to organize the tools for their design and R&D departments. They were going to be drawing in... first AutoCAD and then other things, and it wasn't necessary anymore. So where the big ones were still working with all kinds of very expensive software and we just didn't do it and we never did it and we didn't have to. So it was like you can sail the ocean with a big ocean ship but you can also sail the ocean with a small boat. And I think our strategy was to just sail with the small boat, being a little bit vulnerable, but then you can go wherever you want. That's what we did, I think. But we never had big money or anything. We just wanted to live and we liked what we did. And we still do that.

## 0:15:36.740 Valentin Bufler

Yeah. And I think also the theme that is very common is this willingness to experiment with the business model and being open to also change things up on that side.

0:15:45.130 In6 Yeah.

## 0:15:45.610 Valentin Bufler

Umm. I see that with some other studios who maybe become part of other startups, because the paying clients that are paying for hours are kind of declining. But it's interesting to see also the route of fully committing to a venture and building it themselves.

0:16:4.20 In6

Yeah, one of her clients used to say if you really wanna make money, you just start producing chairs, selling chairs. [laughs] But that's kind of cumbersome. We don't do that. Yeah. So yeah, that's an answer to the question I think, right?

0:16:31.560 Valentin Bufler Yeah, I would say so.

0:16:33.90 In6 OK.

# 0:16:33.970 Valentin Bufler

And generally would you say that in the beginning the strategic questions were always product related or did you also get questions more company strategy related like?

# 0:16:47.320 In6

Absolutely. But being married and having a twin. I just didn't feel comfortable getting people in my office and I was totally over asked. But I was happy that I could manage to be a mother, stand at the school at 3:00 o'clock and still write a quote for a new project. And we were always very, very busy and we knew it wasn't the best model to do it and we could maybe do better, but we knew also that if we would want that, that we would have to be more acquiring and more going out, hunting jobs and hunting projects. And actually we were just not interested in doing that. We love to work with like 2-3 clients that come to us every now and then and we always had a project that would last maybe long. But every three weeks we would have a presentation and we would do some things. And then we came there and then we got a new assignment. It was just rolling, you know, it was enough. And we had fun. And sometimes things came too close and there were lots of deadlines. We had to juggle with the balls. That was what we did and it was just like active time and we liked it and it was nothing like what the others said. I think it was. It was very different. So we have discussed a lot in the beginning. We're doing it all wrong and we should do what the others do, but we didn't want to do that. So we kept doing what we did and we just looked how it goes and I don't know, we did some presentations on like the fair in Utrecht.... there's a "toelevering buerse" [fair for suppliers], we did that like two or three times to present ourselves and then try to get new customers. But we weren't very good at that. [laughs]

# 0:18:51.850 Valentin Bufler

And like the skills you learn during your studies, industrial design... Or I guess a general industrial design background and also working in industrial design... How well did that prepare you for that change into becoming more of a producer yourself?

#### 0:19:8.870 In6

The training well, our vision is that you learn to design on the costs of the customer, not the school. So whatever we were prepared for was not what we did afterwards. We just do it on the job, learn on the job. And everything you learn on the job, actually, you can't prepare yourself. You can become an economic bachelor, but you have to learn business by being in a business so... yeah... What can I say? Did it prepare us? I don't think so. Maybe one choice topic was client marketing. Uh, which was the frontliner of "small is beautiful", which was my favorite choice topic at the time, but that was all about "keep it small" and that's what we did all the time. So yes, it may have prepared me. But I don't think that was a strategic choice. It was just like what happened or something? I'm sorry. [laughs]

0:20:16.570 Valentin Bufler No, it's good because.

0:20:18.20 In6 It's an answer, right? [laughs]

# 0:20:19.840 Valentin Bufler

I mean it's helpful to hear because also a lot of the times when I see studios talking more about

working in a business context or in a strategy context, it's very close to what I would say every industrial designer does, which is question the brief, maybe reframing the question and these things. But then the question is: is that actually already strategic work or work in a more business sense? Where is kind of there the border? And it's interesting to hear from a perspective where you stretch that, where you didn't stay just in product development but also had to go into these areas that are I guess a bit further away from what we are normally working on.

#### 0:21:2.970 In6

Well, of course, when we had to make the move, I was like Oh my God. So I wanna be prepared. So you grab everything you know, you go back to Cutler [?] You go back to how do... "oh my God, I have to make a discounted cash flow. How do I do that?" Just trying to get tools and things and how things work so you go back to the models you go back to the theory and you use that to make it clear for yourself which steps you might have to take, but you never know exactly what's gonna happen. But you have to try to do it like the book says. So, that was helpful and that helped me, because I know I knew where to find the information. I knew a little bit about business and about marketing and about all those things. But during the studies there was also one topic which was called elementary bookkeeping or something. And I flunked there five times. [laughs] And I never understood what the balance is of a company until we had this company. I said ohh, this is *my* balance. It's not a paper balance in a book. So things become real once they are real and some things you just can't learn, you can prepare yourself, you have a nice idea, it's all in your head. But once it's the reality, it's different because it's moving, it's changing and you need tools, you need to find yourself a strategy. You try to do that but it just never happens the way you think. So yes, it helped, but in a limited way. I think it helped, yes.

0:22:50.610 Valentin Bufler
As I think we are now about halfway through...

0:22:56 In6 Thank you! [laughs]

#### 0:22:57 Valentin Bufler

 $\dots$  and — you're welcome — and having now also this perspective of being a business owner basically, so not just of a studio, but also a producing business. Does that influence the way you do design?

# 0:23:7.900 In6

Ohh yeah. Absolutely. Well, that's interesting, because before we started to be a producing company, we were always in the chair of the designer presenting the idea to the client, right? And now we are sitting on the other side. So the design is there and we turn the chairs like, OK, we're going to... are we going to make this? What's maybe a problem? You look with other eyes. You look with eyes like, am I willing to invest this much money? Is it going to be better if I change the small detail? What's the added value of that decision towards the cost? So we're more realistic in expectation and we have more insight into what's logical to change with respect to the design and what is not really bringing a lot. It's more because you have the background you know which materials are going to be there? Uh, what does it cost? So you have more feeling with the influences of what the design change will bring. And you're better at weighing that balance, I think. Also, by having now actually produced things, you learn, you learn what does not work and what does. So you learn that some of your perfect ideas happen to be not so perfect because they come with a lot of change of tools and costs, which [is something] you never know before. So having these insights makes you design in a better way because you know better how to get a good mechanical construction with moving parts that is not going to fail. You learn. So it's very, very fruitful in that way. And I think, especially In6A, having done 22 years of Industrial Design commission-based for others, having now done like almost 10 years of startup, 10 years were almost heading for, he has learned a lot. He had the design skills, he had the experience and now he had the opportunity to create a lot of new things and see what his design mind has made and how far... He also assembles everything so you learn so much and you start to think in a different way. And that was the most interesting part. So it kind of grows your skills that I think, yeah.

#### 0:25:52.410 Valentin Bufler

Yeah, and having to convince yourself also of your design ideas and this dialogue.

#### 0:25:56.120 In6

Be critical because clients are complaining. I mean, you're becoming humble in that sense, like it has to work. It has to be perfect. It's not you that has the perfect idea. The product is leading and the result is leading. So we also have had to sell what we have designed and at first we were like we're not going to do that. That's for the salesman. And then we learned it's very hard to sell things. It's really very hard.

And we have a lot of respect now for the people that do that. So that's also very interesting. So we kind of learn every day. Yeah, and the design learning is among that, yeah.

#### 0:26:39.550 Valentin Bufler

Yeah, that makes sense.

Yeah, because I'm also very interested in the implementation part of strategy and so my... I guess hypothesis in a way, is that designers who usually work in this strategy execution part of a process have now these insights that they bring also into the strategy formulation. And that that can be helpful to be more, let's say realistic, maybe with the strategy, because you do have this understanding of what it takes to implement the strategy and maybe that is a benefit that a strategic designer might have above a business consultant who only deals in that strategy formulation part.

## 0:27:23.300 In6

Wait, now you lost me. You're talking about a strategic designer and you are talking about a business consultant. And at first you were talking about strategic designing and implementing the strategic design.

Are these four things or....? It's a lot of words and I lost it.

# 0:27:43.920 Valentin Bufler

OK

I think the way I learned it here about strategic design is this idea that designers use their skills in a strategic context. And we usually learn here that this context is either in internal teams of big corporations or as strategic consultants for big consultancies. There we are kind of in direct competition to traditional business consultants.

# 0:28:22.470 In6

Ohh there you lost me again. First you have the strategic designer in a team working at a company and trying to get the strategic design strategy for the company from inside out?

#### 0:28:36.650 Valentin Bufler

Yeah.

#### 0:28:37.60 In6

And you have a business consultant coming over and taking off nice expensive hours and dropping a few ideas: "You should do this or you should do that". Is that the discrepancy you... roughly speaking, is that the discrepancy you're talking about?

#### 0:28:56.190 Valentin Bufler

Umm yes, that definitely plays into it.

# 0:28:58.910 In6

And then the ideas that the ones from internal internally... from inside out you can have a better view of what's best. But on the other hand you need fresh input, right? So I think it's both good, because if you're in the internal situation, you miss the rim look. You know, you're in like a bathtub that's becoming warmer and you just stay there. And we've been there too. So it's very, very ... You can try to overview everything, but you always miss things. So the one from the outside... It's always good to contact them and just for maybe a few of them to verify what people think and also what we

experience that people from the outside, did they just drop things and stack data that they actually don't understand. They have no idea. They don't know. So on the other hand, you have to weigh the idea that you might be on the wrong path.

So. Uh, it's difficult. It's difficult. You never know for sure if you're too sure, it might be a blind street and also it's very hard for an outsider to have exactly the idea what is necessary for you, given your chances and given your possibilities on this specific market. Both are actually not good. [laughs] I think.

#### 0:30:31.80 Valentin Bufler

Yeah, it's too extreme. Only one thing, right?

# 0:30:34.250 In6

Yeah, it's not the one that is better than the other, because the strategic consultant could be pointing out the spot that you overlooked. And it's really interesting to try and then you should take the inside team to try out and see what's working. On the other hand, the inside team can be too much on the kind of blocking road that doesn't see any hurdles and other ones see hurdles that you don't look at. Or that branch is going down the hill because of that development. So yeah, always look outside when you're small and if you're big... Yeah, I don't know. It may be so big that you don't even know what's going on in your company. That's also a problem. It's not so easy to do the right thing as a company.

#### 0:31:27.750 Valentin Bufler

Yeah. And it's probably also a kind of movement between those poles.

## 0:31:32.60 In6

Yeah, yeah, most of the time, it's the director that has the nose, like "we're going that way, guys!" and then you have to get everyone along and the whole ship has to be turned and is very hard. I don't know. I don't know what's better. I don't know. I really don't know.

# 0:31:49.810 Valentin Bufler

It's probably also not necessarily better. Maybe it's just different and it has its benefits and disadvantages.

# 0:31:58.970 In6

I think you have to start with the company that you want to design something for or think about if it's a company that is very small and not very oriented to the outside. Then I think it's very good to get fresh new I ideas, but if it's a company that's very alive and has a lot of context everywhere and they know what's going on, then it's different, then maybe they try too much and they have to focus, you know it's a matter of... and you cannot in general say like what's the better way. It should match the situation. And it has to do with what the company wants to do in the future also.

# 0:32:48.490 Valentin Bufler

Yeah. Thatt leads me maybe to my next question, having worked more on, I guess a project basis with clients previously and now transitioning towards being engaged in one large project, having a company...

And how was that transition for you from these short term projects to a long term constant engagement with strategy and production.

# 0:33:18.140 In6

Umm well, you feel very fulfilled when you can do your... the company you build is going to... It has now its suppliers, it has its clients. We're big in Japan for instance. We're doing a good business in Japan and it feels very good to have brought up something that's alive and moving. And even if it's small it's something that is there. And that's a totally different feeling from having brought your idea to the customer and then leaving it there and I have to go back and then after a while go back and OK, they did something with it.

And well, it's more close to yourself. So you, you're you're part of the whole thing. And that's very, very fulfilling. And we like that very much. Every day it's a joy to do the things. And if it's not going to be very

... you have got some times that there is a problem or something and if the client has a complaint, we really we really are unhappy. You know we want the client to be happy again. So we want to solve it, we're going... It's far more our life fulfillment than it was before. Before it was "Oh my God, we have a we have this term we have to have this finished. What are we going to do? We have little time, OK we're going to be very strategic now. You make this, you make that, I'll try to get this done and then we'll see if it works and if they bite it." It was always like keeping them satisfied and doing as little as possible because we were very limited in time. But make it look good and see if they can do something with it, if it inspires them. And most of the time it worked. Sometimes it was hmm, hmm, hmm, but that was different. It's a different thing.

0:35:38.880 Valentin Bufler I would say so, yeah.

Is that an answer to the question?

0:35:40.210 In6 OK.

# 0:35:40.860 Valentin Bufler

Because I feel it's interesting, this understanding of design, where we always kind of come to a point where we hand in something, a project or we present something, but we also know there could still be some work done on it and it's never really done.

#### 0:35:56.100 In6

It's never finished. And what we notice now while we have the opportunity to be critical all the time is that we always had the idea: "This is a nice presentation. This is going to be it". And we learn now and in the company that it's actually very hard to come there where you can say "this is it". [laughs] It's never "it", but there comes a point that you have to make it finish because there's no time because you have to make decisions and you know it's never going to be 100% good. But this is reasonably good and it has every... We learn to be less definite with things, less square, and "this is how it should look like and don't deviate from it". We have the idea, we know we want this, but we are less... we are really more, I think we're more flexible in changing things, not like we flip all the time, no, because we want to have what we want, but we can just be better phlegmatic when it appears to be just not a good idea. So that's the difference I think. That's what we learned. And we have those things when we were with clients and sometimes they said "well, sorry, we really have to change this". And it was sometimes very disappointing. And we were sometimes mad because they made it too thick or too "something". And now we learn like, yeah, it has to be sometimes a little bit less nice because otherwise it doesn't work. And that doesn't mean we don't construct right. It's just you don't know everything at the front and sometimes things happen and you have to adapt. And that's, I think more our strategy now to be more open for adaptation. I think so. Less rigid, yeah.

# 0:38:7.80 Valentin Bufler

Yeah, maybe the last thing I wanna touch up on is this idea that generally designers, I guess in the beginning mainly of a project, explore context and then the context influences of course the outcome of a project and I was wondering if now with this different way of working...: Would you also say that the outcome of your project or of your process, does that also influence the context in a way?

#### 0:38:50.650 In6

Wait, I don't follow again, please.

# 0:38:55.650 Valentin Bufler

Ok, so this idea of I guess traditional design: We do explore in the beginning, this divergent part of maybe the double diamond and then we always come to a very clear outcome.

0:39:10.670 In6 Yeah.

#### 0:39:11.170 Valentin Bufler

And we kind of say, OK, this is the solution to the problem, but we don't really recognize that by creating this outcome we also change the context around it because now this outcome exists. And it wasn't there before. And that kind of changes the problem as well a little bit.

# 0:39:28.680 In6

That's true. And you never know at first, because you didn't know, because it wasn't there. And then you create something and you also create problems with that which are new, that weren't going to be and then you have to move back and forth... But the question was...? [laughs]

#### 0:39:48.20 Valentin Bufler

Yeah, just if you experience that more now that you have a different perspective than previously when you were working for clients?

# 0:39:57.160 In6

I think our iteration has improved. We're better in iterating and quicker in iterating. Seeing it quicker that we have to iterate and change things strategically. So we are quicker in deciding which way to go because we know more. We know more about the markets. If you know more than you can better think ahead. It has to do with thinking ahead because even if it's not there yet. If you think ahead, then some of the things that you will encounter once it's there, you would know before and knowing the market now enhances that inside the head. So I think we're better at iterating. So the things that In6A's creating at this moment are pretty much... Uh, very close to being definite. But even if we say, OK, this is it, which we have encountered in the last year like 3-4 times with other parts and other components, not only in our dental, but we are, we are going to move to another field now for the prosthetic market for arm prosthesis. And then you encounter things and you learn things and it's iterating, it's iterating and we have it all the time. So you just know you say "this is what we're going to do" and half a year later "shit, we have to change that part". OK we're changing the part and that comes with the job. So you are more aware of risks and evaluations also, and I don't know. I think the doing improves the design. So it's not just theory. You have to practice in order to improve the skills. You have to put into practice what you preach. Maybe that's the bottom line.

# 0:42:7.320 Valentin Bufler

Yeah, I really believe also that design is such a practice based profession and we need to...

# 0:42:11.180 In6

Yeah, absolutely. And as I said, you can't learn it. You have to do it.

# 0:42:16.340 Valentin Bufler

Yeah. And it's this dialogue also of making and thinking.

# 0:42:20.50 In6

Yeah, yeah, absolutely, yeah.

I remember my first little bicycle for kids, a 3-wheeler and it was there and it was actually there: "Oh my God, this doesn't make sense. Should have done that and that and that". You have to get through that. So things are too big, details too small. At first those are the big mistakes designers make: small details that are never going to keep things together and the overall dimensions are too big because they want to express themselves. That's the first mistake you have to unlearn.

And then ohh! That's the input from Martin coming now.

# 0:43:6.370 Valentin Bufler

Yeah, I don't hear him.

# 0:43:7.810 In6

In6A says that in the beginning of our design company, we always got this quite framed commissions. Like, "this is the target. This is what has to be in there. Make it nice". It was very limited and we were always boxing against boundaries to get it more on a higher level. And sometimes we really have to

fight for that. And that was frustrating. And now he says I've got the whole opportunity field and now the problem is what to choose? So that's basically the difference. But knowing more about the context makes you better capable of doing that. It's more interesting, it's more interesting and it has more to do with integrating all your skills into that one product.

0:44:28.710 Valentin Bufler

OK.

Great. Thanks!

0:44:32.560 In6

Beautiful sentence. [laughs

Yeah, OK. So I hope our small insight can help you.

# 0:44:44.810 Valentin Bufler

Did you have any questions for me? Ohh. In the beginning you asked about the developments that I'm talking about.

0:44:50.510 In6

Umm.

#### 0:44:51.210 Valentin Bufler

So broadly speaking, I would say at the end of the 90s, early 2000s, we had this move away from manufacturing business here to much more.. first to other parts of Europe and then overseas. And then based on my literature research, a lot of companies, design companies, had to adjust to that and therefore they started going more into strategy...

#### 0:45:13.460 In6

And offering Chinese molds and those things.

## 0:45:16.610 Valentin Bufler

Yeah, exactly. Becoming more of a knowledge based economy, trying to make sense there. And then definitely '08 until '12 was I think for most designers very hard.

0:45:29.120 In6

Yes.

# 0:45:30.250 Valentin Bufler

And then we definitely see after that a lot of strategy coming up as a way I guess of future proving and of diversifying the business.

#### 0:45:43.70 In6

Finding your niche, it could be ecodesign, be medical, it could be anything. Find your niche and make your world in the niche.

# 0:45:52.580 Valentin Bufler

Yeah, yeah. And in the crisis of '08 and later on design thinking became a thing and kind of took over more the business world. I'm personally very critical of design thinking, but it did help promote the idea of design, but which also led to a lot more internal teams being set up, which on the other hand, again harmed businesses outside, or like studios. And now, with the latest crisis of, like COVID and now also the insetting recession, these studios experience again, that strategy is the first thing that's cut. And the parts of their business that still works kind of is this execution traditional industrial design part. Umm yeah, it was very interesting for me to see that there was this push towards more strategy, more what I guess industrial designers always did kind of what you also talked about just now this boxing for your space and questioning a brief and reframing. But now it's much more openly talked about and positioned in a way that designers understood that.

#### 0:47:4.660 In6

Yeah, people know more about that... Everyone can make a technical drawing now and everyone has some kind of EPO engineer that does the design so it has become more common to create things also. It's not our exclusive thing and it's becoming more general.

# 0:47:35.60 Valentin Bufler

Yeah, not just thinking about solutions, but also thinking about the problem.

0:47:38.510 In6

Yeah. Yeah, exactly. That's good.

0:47:44.80 Valentin Bufler

Yeah.

#### 0:47:41.610 In6

Because that's what we wanted at first. We wanted to have everyone committed and once they are and you said like "umm, I don't know of any added value anymore" because I am also in the business solving problems. Yeah, something like that... But I think it has the same development in graphic design because we had this automatization and everyone has a WordPress website template and it's becoming more common to be making things and to create things. Not that everything's looking good now, but it has become more common for people to be involved in that. Which is good.

## 0:48:29.150 Valentin Bufler

Yeah, also an understanding of design and what design does.

0:48:34.830 In6

OK.

0:48:35.840 Valentin Bufler

Thanks so much for your time and the insights.

0:48:39.190 In6

OK.

0:48:39.480 Valentin Bufler

And have a great day.

0:48:42.270 In6

Yeah, thank you. I'll look forward to the result of your thesis.

0:48:47.430 Valentin Bufler Yes, I will send that to you. 0:48:50.340 In6 OK, good. Bye bye.

0:48:53.350 -Valentin Bufler

Bye bye.

# Appendix D - Codebook Primary and Secondary Code Cycle

	Codeb ook			
"How do small to midsize industrial design practices address strategic challenges?"	RQ			
	Numb			Sourc
Category	er	Code	Quote	e
Diverse Markets	1	They work in different markets	how we work is applicable to a lot of different markets	ln1
Client Relationship	2	Client relationship determines the type of work	It depends on how well we know the clients [] the better we know them, the more we think with them and the better we know their market as well and we help them to strategize for their market.	In1
Diverse Markets	3	they "don't limit it to certain markets."	we don't limit it to certain markets.	ln1
Project Type Development	4	Clients rarely request strategic projects from the start	it's not usual that they come to us and they ask us to do strategic development	ln1
Relationship		Strategic projects develop out of	It's usually something that developed during a project or once we	
Development	5	existing relationships	get to know them	ln1
Project Type Development	6	Strategic work develoops out of projects	And then we just think along with them and then their process starts and then "let's do a workshop about it" and then it, yeah, it becomes bigger and bigger.	In1

Role Change	7	It transitions into a advisory role	And then in the end, we're discussing and we're basically advising on what we would do and we are trying to organize for them to get all their thoughts straight, you know and that they can make wise decisions.	
Role Change	8	high-level strategy advise after long relationships	we do have some clients that we have worked with for like 10 years or longer and they ask us, like, "OK, if it was your company, what's next, what should what would you do?".	ln1
Strategic Work Types	9	research as strategic work	And then we do a little bit more research and we also go into depth where we do market research and look at all the competitors and try to find new ways to beat the competition	ln1
Distribution Strategy/Execution	10	Small fraction of their projects is strategic	But that's maybe 5% of our assignments or something like this	ln1
Project Type Development	11	Slight increase in strategic projects over time	"And would you say that increased overtime that more and more clients ask you also for these types of services?" "Yeah, I think so, yeah."	ln1
Project Type Development	12	Strategic projects develop out of previous ID projects	we already do like the whole project and products for them. And then yeah, we just think along with them, that's basically it. And it evolves towards strategic [design] as well.	ln1
Clients Requests	13	It's strategic when the client frames it that way	I think if they [the client] really make it [] an assignment [it] becomes strategic. If they really ask us to do work in this.	ln1
Client Relationship	14	They are involved in the development of the brief They are involved in the fuzzy front	But in a lot of cases when we [] get the question of making a product design for us [the client], we are also already strategically involved, but it's more in the process before the brief gets done So at the moment in which this project is kind of getting in shape	In1
Strategic Work Types	15	end	and you're trying to define the scope of the project	ln1
Strategic Work Types	16	"Success Factors" as KPIs	we always try to define the 'Success Factors' as well. () we're trying to know what we need to do to make a good product and a good project for the customer.	ln1

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		It's strategic when the client frames it	that's also a little bit of strategy, but we don't really call that strategy projects, we call it strategy projects when they ask us:	
Clients Requests	17	that way	Can you strategize for us what to do?	In1
Strategic Work Types	18	Strategy as portfolio and R&D definition	[strategy is] portfolio strategy and [] what kind of R&D do you need?	ln1
Process		division of labour between client and studio	in a lot of cases we do the exterior and the user experience of a product and the interior is [] usually the intellectual property of the company that we work for.	In1
Methods/Tools	20	Methods change depending on the challenge	"And do you have specific approaches or methods that you use for these strategic challenges?" "No" "It's just depending on whatever the?" "It's always different, yeah"	ln1
Process	21	Early involvement speeds up the execution	to be able to think along on this because you know if you just get a design brief and you have to do this, then it's more like, OK, just doing what you already thought of. So it's really nice.	ln1
Process	22	Strategic work is time intensive	It takes a little bit of time before you can develop this strategy, so you're in like, yeah, you're in a lot of brainstorms.	ln1
Process	23	Slow process	And sometimes it looks like you're not getting anywhere. Uhm, you're just trying to research and that can be a slow process or something and it's important to make sure that you have time for it to get your mind straight.	In1
Challenges	24	It's challenging to take the time	with the whole company we have 30 projects or something running at the same time. So it's sometimes difficult to [] take the step down and make space for that.	ln1
Capablilities		Strategy work is about attitude not capability	[growing capabilities?] I think it's more of an attitude thing. So the people that work here are really ambitious and they are really already looking and asking about these kinds of things	ln1
Strategic Work Types	26	Strrategic work as Research plus Visualization	a few years ago, we did strategic research which was just strategic research. So not so much about the product design. Our added value there was that we can really make quick visualizations of ideas	ln1

Strategic Work Types	27	Brainstorming and visualization workshops	we basically organized for that company brainstorms and then they came up with a lot of ideas and we could just sketch on site their ideas and they could say "yes, I want this" or "no, I want that or that"	In1
Organizational Changes	28	Organizational change for these workshops	That really helped them organize and we are trying actually right now to also do this for different companies, we call this the scope design lab	In1
Positioning	29	Attempt at selling only strategy	that's something that's a little bit organizational. [] we're trying to basically sell these kinds of projects without what all the other projects normally have in front of it before we do these kinds of things.	In1
Organizational Changes	30	No need for different workforce	So we did do a little bit of organizational changes, but I believe that we have the right people to do these kinds of projects, so we don't really need to change, we don't need to hire different people or something. Everybody here is a design thinker.	In1
Client Relationship	31	Aiming for returning clinets	we're aiming at long term relations and we're aiming at companies that do have this repetition on new projects [] we always try to develop together with our clients	In1
Client Relationship	32	Complementary capabilities to cllients'	usually our clients have mechanical engineering for instance or marketing. And then yeah, they hire us to do the design work	In1
Capablilities	33	Visualization skills as strength	I think what our power is [] that we can really visualize the ideas directly	In1
Capablilities	34	Focus on visualization over processes	I think they [business consultants] are more focused on processes and only on processes and not so much on the products and how to improve the products and to quickly visualize the ideas that you have	
Methods/Tools	35	Visualization of products and processes	it's visualizing in sketches for products, but also in visualizing processes	ln1

Capablilities	36	the power of visualization	that just makes it really insightful for the company bosses basically to see so that we can understand that there is an issue. Or we can maybe find links to different places and that also helps to organize thoughts.	In1
			the strategic questions always arise and we always discuss them	
Process	37	"Strategic questions always arise"	also during all the industrial design projects	In1
O	00		we try to discuss if we should change the design brief towards that direction. You could say that that's strategy as well. But I also	
Strategic Work Types	38	Reframing as part of ID, not SD	think it's just in industrial design engineering that's just part of it	ln1
Client Deletionship	20	Evenutive like to discuss strategy	they [CEOs & CTOs] really like to talk about high level strategies and they really like to discuss this because they don't always have	
Client Relationship	39	Executives like to discuss strategy	a lot of people in their company that are able to do this.	ln1
Capablilities	40	Strategy deosn't require special skills		ln1
Capablilities	41	Intrest as a prerequisite	I also think that different designers are interested in this also. Are capable of doing so, but it usually depends a little bit on also the AMBITIOUSNESS or the way you are, the way you think	ln1
			If you're always looking to make something better, no matter what	
Strategic Work Types  Methods/Tools		Questioning things is strategy  Methods as a communication aide	it is, then you already think about strategy.  We do have a methodology, so basically a waterfall method which we can use. We usually use it to explain a little bit on what kind of phases you have []	In1
Process		Iterations are key	But one big remark always is it's so dependent on iterations.	In1
Methods/Tools		Methods in use depend on the case	we do have some methods, but it's always different. It's never the same, exactly	In1
Methods/Tools	46	Making new things requires making the required tools	When you really have to make stuff that doesn't exist yet, you constantly have to go through barriers so it's impossible to grab modules from the shelves that already exist, put it together and make a machine.	In2

Process	47	Constant reinvention of relationsip with context	And you constantly reinvent your understanding in this relationship between you as a designer, in this case a mechanical engineer, and what's possible within that realm of nature.	ln2
Strategic Work Types	48	"strategic design is not plug and play"	strategic design is not about plug and play. You constantly have to reinvent everything to make something that is of value for another	
Positioning	49	Specialization is problematic	I think that's exactly where everything goes wrong: that people say you are a designer that does strategy making or you're a designer that makes furniture or	In2
Positioning	50	Specialization is limiting	Because non-professionals want to understand what you do you give yourself a name or a name tag and therefore you limit your possibilities yourself by doing so.	In2
Process	51	Adapting to society not organizations	So how do we as an organization adapt to changes in relation to the organizations we work together with, but [] Those organizations are really traditional, so we adapt to a changing society	In2
Positioning	52	they defend society from organizations	in the end [] we defend society from the organizations we work for	ln2
Positioning	53	Outcomes are for organizations not society	organizations are really goal oriented [] [and they give you] simplified design assignments So when you in the end come up with something that kind of makes sense, in relation to that simplified assignment, it doesn't mean anything for society	In2
Client Relationship	54	Organizations live in their own world	a lot of organizations, they live kind of inside of their own reality where they simplify the world	ln2
Positioning	55	Simplifying benefits the organization, not society	simplifying the world it can be very successful, also in relationship to communication inside of the organization itself and everybody feels comfortable. But in the end society cannot benefit from the organization	In2
Process		They make organnizations understand society	we make organizations understand, with what kind of society they have to create a relationship with	ln2

Complexity	<b>57</b>	There is only reality, no ill-defined	people who say that things are ill defined, don't understand that	ln2
Complexity		things	it's not ill defined. It's just reality	In2
Complexity	58	"it is defined, but it is very complex"	it is defined, but it is very complex  You have to dive into it and you have to accept that in creating	ln2
Process	59	Organizations might not understand at first	outcomes there's a big chance that the organization you do it together with at first they don't understand shit of what you brought to the table.	In2
Client Relationship	60	Org.s might not like unpleasant interactions	So if you want to create pleasure in an organization and we come in later and we do something and those people say, God dammit, this is difficult, so we really have to get our brains around it, then people get disappointed and they want to go back to the pleasure they experienced before.	ln2
Client Relationship	61	Studios set standards of interaction	So, the funny thing is, in doing what a lot of other studios are doing, you really destroy something. You can't go back anymore. You create a point of no return.	In2
Strategic Work Types	62	SD is preparing the ground for different attitude	strategic design is not only making something, making a strategic proposal, but it's also making people understand that in order to create the strategy you need to have a completely different attitude than the kind of solving today's problems.	ln2
Process	63	Work that makes sense takes time	if you look at the business model, if you really want to make something that makes sense, it takes time	ln2
Clients Requests	64	Org.s want it as cheap as possible	that's of course opposite of how organizations work because time is money and money is something where they say, "OK we want to be willing to do it as cheap as possible".	ln2
Process	65	Creating the right conditions is time consuming	it just takes a lot of time to create the right conditions before you start doing things.	ln2
Process	66	Org has to be prepared to have leverage within org.	if I'm gonna do it now myself, there will not be any kind of leverage within the organization. So at first I also have to prepare the organization	ln2

			that's something completely different I think, than what	
			consultancy normally is all about because you just sell your	
		Preparing the org. is usually not	consultancy. You want to minimize the investment in the	
Positioning	67	done	beginning and you want to maximize of course your billable hours.	ln2
			we don't want to talk about clients anymore, because it's stupid.	
Client Relationship	68	Depature from term "client"	Because in the word client is already a power relationship hidden.	ln2
			we're interested in the outside world. And based on that shared	
			interest, you can define not a project, but you can define a	
		Defining a common assignment of a	common assignment of a common responsibility you want to	
Client Relationship	69	shared responsiility	share.	ln2
			So it's not about seeing the world as something that you harvest	
			money from, it is something where you take responsibility for,	
		Seeing the world as something to	which is completely different. And in taking the responsibility for	
Positioning	70	take resposibility for	That's where the value exchange is going to happen.	ln2
			constellations of organizations are necessary to make happen	
		Org.s are necessary to make things	what we think is needed in society. I see that as a kind of a	
Positioning	71	happen	dynamic constellation of interrelationships you have to manage.	ln2
			we are not the experts in [example]. Because that's an expertise	
		Interest in how society reacts to	of course we do not have. But what we are interested in is how	
Positioning	72	assignments	does society relate to an assignment like that?	ln2
		Input of society into assigments often	often what society feels is meaningful is not brought into that	
Challenges	73	neglected	equation of these big assignments	ln2
			we are mainly interested in: how can you make these big societal	
		Making these assignments a societal	assignments, like the energy transition, a societal issue instead of	
Challenges	74	issue	a quantitative, goal oriented policy push	ln2
		Designers create here the	for the upcoming 10 years we are active in this field. And we as	
Role Change	75	consistency	designers create the consistency.	ln2
			from the other perspective, you're a consultant, you bring a	
		Normally the org is responsible for	strategy to people, you run out, and then the organization is	
Role Change	76	consistency	responsible for the consistency over time.	ln2
		-	· · · · · · · · · · · · · · · · · · ·	

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Positioning	77	"Responsibility to keep things going"	what we do is we take that responsibility to keep things going.	ln2
		People change the organization	it's a very natural process where also the people coming in bring	
Capablilities	78	(studio)	of course also other expertise which is changing our organization	ln2
			the organization how it started in the beginning is completely	
			different, simply because of the people that are here. So every	
Organizational		Changing people changed the	time there's a new person coming in, we have another position as	
Changes	79	studio.	an organization.	ln2
Organizational			we didn't have to change our organization, but there are these	
Changes	80	Important guidelines in the studio	very important guidelines within our organization	ln2
			we work within kind of a framework and a common understanding	
		the individual works within a	what we mean as a group – but in the end, everyone kind of	
Positioning	81	framework	represents his or her own position.	ln2
			I think it's really important that everyone feels empowered to give	
Positioning	82	Expression of individual agency	expression to his or her agency within the organization	ln2
			I think a real design brief should deal with "this is what we want to	
		Human/Society-centered design	accomplish with people". "This is how we see society working" or	
Strategic Work Types	83	briefs	"this is how we see society not working".	ln2
			I think strategies are often defined on the completely wrong level	
		Strategies should be on the goal	of abstraction. They're often at the means level and not at the	
Strategic Work Types	84	level, not means level	goal level.	ln2
			it's a never ending evolution of "how can we get a grip on the	
		getting a grip on the world through	world through the theories we develop?" And how can we make	
Strategic Work Types	85	theories	as few mistakes as possible?	ln2
			I think that's often lacking with a lot of strategic agencies, that they	<i>'</i>
			don't have the theoretical knowledge at all to be sure that [they	
		Lack of theoretical knowledge at	are] a little bit moving into the right direction. They don't have a	
Challenges	86	agencies	clue.	ln2
			ViP is I think key to everything because it's kind of a basic	
			structure which still allows for a lot of exploration. So it's a	
Methods/Tools	87	ViP as basic structure	framework that gives us freedom.	ln2

			if we have frameworks that give us freedom, then it's fantastic. If the framework is gonna be dogma it is withholding us [from]	
Methods/Tools	88	Frameworks need to give freedom	growing then we are on the wrong track.	In2
		_	my defense is not that we did a nice project for another	
			organization, but my defense is "this is how we think the world	
		Defends knowledge, not nice	works". So I defend knowledge. I do not defend our own work.	
Positioning	89	projects	That's a completely different position you take as a consultant.	ln2
			tools like working with Personas, which I think is completely	
		Strategic design tools lack often	bullshit from a theoretical point of view. And a lot of consultants	
Methods/Tools	90	theoretical backing	and strategic consultants use those kinds of tools.	ln2
Methods/Tools	91	Personas need to be used differently	I think you can use personas, but not how they are being used.	In2
			when the method starts to create constraints then you really have	
			to be careful. you see it literally in the design of the products that	
			you [can] see the limitations of the tools that were being used.	
			And I think that's fair and that also applies to strategic tools or	
Methods/Tools	92	tools	roadmapping tools or whatever, so	ln2
			I think in the end, of course, you can't avoid it, but if you don't	
		Org.s need to be aware of limitations	even talk about it yourself, as an organization, that you may be	
Methods/Tools	93	of tools	limited by the tools you use then I think you're on the wrong path.	ln2
			I think the key to it is: creating a strategy is not simplifying the	
			world, but it is trying to find patterns in the world. And a pattern is	
		Strategy is finding patterns in the	different than simplifying because a pattern also allows that	
Strategic Work Types	94	world	there's layers under.	ln2
			I think that every assignment has its own pattern. So every	
		WELLOW AND STREET	societal challenge is related to its own pattern or you can say its	
December	0.5	"Every assignment has its own	own framework [] . And every time you have to explore what it	l <sub>m</sub> O
Process	95	pattern"	is, you have to find out what it is.	ln2
Dunnana	00	Repeating patterns/frameworks is	You can't use the same kind of patterns, frameworks from	l <sub>m</sub> O
Process	96	impossible	different contextual assignments. It's just impossible.	ln2

Process	97	Pattern make things insightful	it's how to find that pattern that is the expression that makes things most insightful. And when am I being most insightful with the most diversity with the least complexity?	ln2
Complexity	98	Sweet spot of enough but not too much complexity	It's sense making and you have to look for an optimum. You have to look for a sweet spot where if you make it more complex it doesn't add anything to your understanding and when you make it less complex you lose information.	ln2
Complexity	99	Org.s need time to adapt to complexity	it is this adaptive cycle. So you create something new and then you know there will be a collapse because people don't It's just too complex for them to understand it immediately, but they need the time to embrace it or to start embracing it.	In2
Client Relationship	100	Alination in the beginning	I think a good strategic consult in principle creates alienation in the beginning. And then of course you can come up with all kinds of communication tools to make that alienation as comfortable as possible, but that's the second step.	In2
Positioning	101	Design is not problem solving	I don't believe in design as problem solving.	ln2
Complexity	102	Everything is ill-structured	in principle everything is ill structured, even this chair. So the Eames chair. So if I lift it up, I can In this object there are so many wicked problems! So it's everywhere. It's not only strategy making, but it's everywhere.	In2
Solutions	103	A solution implies a perfect solution	the world allows for a multiple array of meaningful interventions. So a solution implies that it is the perfect solution for the problem we have defined. And that's not what design is all about.	In2
Solutions	104	"Design is giving society possibilities"	Design is giving society possibilities to use. And there is an array of multiple possibilities.	ln2
Complexity	105	There are no wicked problems, just reality	we have to get rid of this whole idea of wicked problems. Bullshit. Because in principle the world is like that.	ln2
Positioning	106	Design is about giving society opportunities	design is not about problem solving, but it's about giving society opportunities.	ln2

Process	107	It starts with the definition of design	it starts with the definition of design. Then it starts with the definitions of the concepts that live within design	In2
Process		Only then can the other things follow	And then maybe you can find out: OK, how can we start organizing this whole process and what does the strategy mean? And who is responsible? Where are responsibilities? What is responsibility?	In2
Challenges		Stategists avoid giving answers to those questions	I think to be honest, that the strategic people, also within industrial design engineering, are really good at not giving answers to these fundamental kinds of questions.	
Process	110	"people long for a grip of the future"	if it's about strategy making, it is about the understanding that people long for a grip of the future. So it's very philosophical.	In2
Complexity	111	"wicked" takes responsibility away	when you use something as a "wicked problem" you, in a way, also distance yourself from the responsibility dealing with that complexity, because you say it's wicked, so it might go wrong.	ln2
Strategic Work Types	112	Strategy making is often wrongfully painted as fun	So if you defend society, you often create a relationship with the organizations you work together with that is uncomfortable in principle, and I think a lot of strategic design is based on the idea of bringing comfort. Of being understood, of simplifying, of fun. And there's a lot of tools that bring fun in creating a strategy. I hate that because I think society in the end is the victim of it.	In2
Ŭ ,.			I give an example just by writers who write novels. Because writers write novels, they don't start from a problem. They just write a novel. And then people read it. And those people, they say "that book of that writer. God, did you read that book? It's just mind blowing". And that's exactly, I think, what design is all about. So you do something that was not expected. And was not the solution for any problem. Whatsoever. It's just there and it makes sense. And maybe it could be a solution for a problem, but it	
Process	113	Starting point of novels	shouldn't start from that idea.	ln2

			through the years we have also had different sizes and the waves	
<b>.</b>			of the world, and the economy, and all the other departments and	
Organizational			also That, at a certain point, we more and more decided to	
Changes	114	Changes of the studio and focus	focus on the new mobility design.	In3
			since 10 years, we really communicated a focus on mobility and	
Positioning	115	Focus on mobility	also positioned us as a specialist in that field.	In3
			we started in '95 and then we grew at a certain point until a studio	
			of 25, which was for big part also engineering and then we had hit	
			a couple of crisis. So we also had to part with the a larger group	
			of employees and since then we started to focus on the [we]	
Positioning	116	Focus on front end of design	decided to focus on the front end of the design process	In3
			And so that was a bit of an outside development also because at	
			that point in time, we also saw that a lot of companies build up	
			their own in-house capabilities on that end, and so a lot of clients	
			that we worked with more and more did the engineering and pre	
Context	117	External changes	production in-house.	In3
			you either were a design studio or a real engineering studio and	
Positioning	118	Either design or engineering studio	like the model to do both is a bit more the 90s model	In3
			because of the introduction of technology, connectivity and such	
		More clients are now complete	that now we get more and more clients that don't know anything	
Clients Requests	119	newcomers	at all, so that are like newcomers in the markets.	In3
			So they are interested in the whole package. We also talked to	
			partner companies that do the connectivity or the engineering or	
			the manufacturing. So normally we bring them in at clients	
			request but we're also evaluating if we should make that a more	
Clients Requests	120	Whole package	structural position to the market as well.	ln3
			the startups are newcomers in the markets in general, they see	
		Start.ups see potential in societal	general developments in society or the market that they see	

			clients like Mobike or lyft, they do have their in-house capabilities, but they are more looking for the specific expertise to expand that.	
Client Relationship	122	Partner in development	that was always the case that you are very much a partner in the development.	ln3
Organizational Changes	122	Experiments with business models	in our career we experimented a lot with different business models as well. So if it's like in the royalty model or or venture model to to even invest in companies or even start up our own initiatives, that's the entrepreneurial part of the development process is something we've always done.	In3
Silaliges	123	Experiments with business models	as a consultancy your portfolio is very much determined by your	1113
Positioning	124	Clients make your portfolio	client requests, and, as you probably may know or may not at your age, a lot of projects never make it to the market	ln3
		Own initiatives eg. for	So yeah, well, let's say half of your work doesn't even make it to So that also limits your marketing possibilities. So that's another reason that we have always done a lot of [our] own initiatives that we use for marketing purposes, to present ourselves in a specific	
Positioning	125	marketing/positioning	segment.	ln3
Strategic Work Types	126	Convincing clients to reframe	to be honest that that is indeed a lot of times the model that you have to convince them to challenge certain starting points	ln3
Strategic Work Types	127	Wide exploration	So also in our strategy, in the concept phase, we explored quite wide what that unit could be	ln3
Strategic Work Types	128	Challenging requirements	that was also a bit Again, our own initiative, like the team really wanted to develop this two-wheeler. Whereas we were really challenging like what the requirements for it should be.	In3
, , , , , , , , , , , , , , , , , , ,			Well, that's mainly as one of the founders my capability to know a lot about mobility developments and what's going on in the world	
Capablilities	129	Capability of the founder	and that end.	In3

Strategic Work Types	130	Research to challenge the design brief	we also introduced a phase to challenge the design brief to think about: OK, which vehicle category should it really be, that we interviewed various development companies to also get a better feel about the required budget to really bring it to the market. We do benchmark research to visit competitive companies to also get a better understanding of the size and the scope of the project.	In3
- and an analysis of the same			And then there was also a project where we were a bit hitting the	
Challenges	131	Hitting boundaries	boundaries of our own expertise like that we can say a lot of things. But to really be believable and that respect you need also for a certain credibility.	In3
			And so that was a project that we thought that it would have been better to have somebody in the team that has like a credible	
Capablilities	132	Adding credibility to a team	record	In3
Capablilities	133	General consensus over individual opinion	it's like a semi-government organization. So they want everything to be presentable to their higher management and of course nobody's really interested in the opinion of some kind of designer, but it really should be what the general consensus is.	In3
Client Relationship		SMEs can also be interested in individual opinion	So that's very different than like a commercial enterprise where if you have a click with the decision makers and you were very opinionated on some thing and that specific person believes in you then that's enough. But that works very differently than a government organization or a large company.	In3
Process	135	Design process as selling point	In general that's of course one of the reasons that designers are more and more used for this, for a variety of challenges that you Especially in Delft, you'll learn a problem solving process that you can apply to various things, so that definitely helps.	In3
D	400		I think also in scenarios not like linear but you can assess different potential scenarios, how something can work and visualize them. Which is the difference, or a distinguishable or a	
Process	136	Scenario assessment	unique selling point.	ln3

Capablilities	143	Being able to afford experts	And it's also not so easy to hire a couple of people if you're like a 10 or 15 designers firm, then you cannot just hire five people that are psychologists, MBA or whatever they do before even selling the work. So that's the chicken or the egg.	In3
Capablilities	142	Difficulty to have multidisciplinary staff	it is a challenge that you have companies like Frog or IDEO that are very big and they have like very multidisciplinary staff. And as a smaller studio it's quite difficult to get from point A to B, so although we definitely have a lot of, especially on the specific topic of mobility, enough competence, it's it's harder to, what I mentioned earlier, to have have that have like a CV of people to be able to sell that into companies.	ln3
Positioning	141	Working for org.s early in their life cycle	So that also connects a bit to what I was saying in the beginning that you have to work for these companies at the beginning of their life cycle and not if they're really established. And so that also brings different requirements for the studio.	In3
Context	140	Internal expertise is wanted	Also, there you see also like in the venture world, investors always want the companies to have internal expertise. So that's also a bit a trend over here.	In3
Context	139	Development to in-house design teams	an overall development is a bit that, for example in tech, that everybody builds up their own in-house design expertise, so that is a bit of a challenge for the agency world.	In3
Role Change	138	Role of the founder	that's also a bit my role as one of the founders that I'm less involved in the details of a project, but that I do look at like what are we doing here	In3
Process	137	"Strategic projects are different in nature"	The strategic projects are a bit different in nature, so they don't so you do maybe one divergent convergence exercise and validate them with different knowledge than in a regular design project.	In3

Olivert Deletion ship	444	Designers were treated like	And by the end of that experience I was quite frustrated with industrial design because even though I liked it, I was aware that designer — at that time, I'm not saying that's the case now, but at that time in the late 80s, early 90s — designers were treated a little bit like adolescents. You know, they were kept away from important decisions, important meetings and treated like teenagers and basically told to make something pretty after all the	
Client Relationship	144	adolescents	important decisions have been made.	In4
Client Relationship	145	Engineers were taken seriously	I had the experience of being an engineer, where you were taken seriously.	ln4
Strategic Work Types	146	Early in research and strategy	they were some of the first people to do kind of research and strategy and design in industrial design. So he was working with psychologists and early ethnography and stuff like that. So I found that very interesting.	In4
Strategic Work Types	147	Not really linked to design	it tends to be very research based, very foresight based and not terribly linked with design.	In4
Strategic Work Types	148	Three types of work	And it tends to focus around three types of work. It was ethnography work, it was trends work and it was kind of market analysis. You know, product mapping and all that kind of stuff.	In4
Diverse Markets	149	Focus on big companies	We focus on big companies, in consumer tech and mobility.	ln4
Challenges	150	Strategic projects tend to get cut	l've recently made a decision to because we've had a tough couple of years. And when the going gets tough and there's COVID or there's recessions looming, strategic projects tend to get cut. They tend to be seen as kind of slightly luxury projects	In4
Challenges	151	Strategic work is hard to scale	there's another problem for small consultants, I think as well as or the type of work I do anyway, it's quite hard to make use of junior/midway people because it's "high octane work". It's quite hard to scale.	In4

Positioning	158	"Strategic bolt-on to core business"	bolt-on to their core business.	ln4
			I was seen really as sort of a business development and strategic	
Strategic Work Types	157	work	consultancy	ln4
		Strategy work vs actual strategy	strategic at all. Well, that's not true. They weren't particularly strategic and they're very much an executional design	
			a they liked the intellectual glow of strategy. But they weren't	
			So when I was a director at Seymour Powell, but it was very much	
Challenges	156	Execution is more crisis resistant	particular piece of execution.	In4
			because they're less, some of them are less connected to a	
			which are kind of more interesting, but they're easier to cut	
			COVID times. I tend to focus on the big pure strategy projects	
			And the execution work still needs to happen in a recession or	
Positioning	155	Positioning vs actual work output	be doing an awful lot of execution work.	ln4
			people might position themselves as strategic, but they still might	
			how you market yourself and the actual work that you do. So	
<u> </u>		3 37	And there's a big difference between how you position yourself,	
Positioning	154	Offering strategy and execution	do the strategy as well	ln4
			we did at Seymour Powell where they do the execution but they	
		o internite initiati agency	I think because most people who do strategy, they do it in the way	
Changes	153	Switch to virtual agency	flexibility to build teams that are really good for a particular job	In4
Organizational			few of my ex team are now freelancers but it gives me the	
			team to what I call a virtual agency. So I now work with quite a	
Challeriges	132	rialu to delegate	I've recently made a decision to switch from a sort of full-time	1114
Challenges	152	Hard to delegate	and I find it quite hard to find people at the right level.	In4
			was a research heavy project, that's fine, but if it's requiring lots of strategic creativity and judgment, it's very hard to delegate that	
			lots of other people around me that wouldn't be so busy. And if it	
			So when we get busy, I would get super busy, but there would be	

			that would sometimes bring contradictions or tensions, because I would sometimes feel like the right thing to do would be to say "there isn't a good opportunity here. You should stop. I wouldn't	
Challenges	159	Right thing to say vs right thing for the busness	invest any more money in this." That would be the right thing to say. But that would be the wrong thing for the rest of the business, because that would be saying no to work.	In4
<b>J</b>			But it was quite hard to win those strategic projects, when you're	
Challenges	160	Easier to win strategic projects	quite a small company and it was easier for me to win the strategy work than it was for him to win the design work.	In4
Positioning	161	Tightened the positioning	I tightened the positioning of Plan to purely sort of research and strategy and that's when we took off.	In4
Context	162	ID became core competency	another thing that's happening in the industry was that industrial design was becoming an absolute core competency	In4
Context	163	"push to in-house ID"	back 20 years ago, there was a big push to in-house industrial design, so suddenly there were a lot more serious industrial design teams there. But at the time very light research and strategy people.	ln4
Positioning	164	Pivot to strategic design	30 years ago companies would be relying a lot more on consultancies for executional design. 20 years ago they were building the internal teams, so it made sense to work with to pivot to just doing the research and strategy and integrating really well with their internal design teams.	ln4
Context	165	Even researchers in-house	now they'll typically have some kind of research and strategy people in the team as well. So we don't tend to focus too much on the research work so much anymore because they'll often have particularly kinds of user researchers.	In4
Client Relationship	166	Higher status of externals	in reality external consultants just have higher status and then internal people they often use us [in a way] where they go "we kind of know what to do. We want your second opinion but we	ln4

		know that you'll be listened to you more than if we if we say it internally".	
		So I think there's still a good fit, but it's in the nature of strategic work that there isn't a steady stream of it you know. So strategic projects are they come around infrequently, you know, because	
167	No steady stream of work		In4
		,	
	3		
168	within ID	·	In4
	Ability to work across silos and		
	•	, ,	In4
	,	· ·	
		The state of the s	
	Hiring smart designers over other		
	-		In4
		We try not to go too far because we know that execution	
		designers are much better than we are about that and we respect	
171	No interfering with execution	their expertise.	In4
		I think that one of the most important ones is how to thread	
		together. The strategic story and how to then articulate that, how	
172	Importance of story telling in strategy	to communicate that in an engaging way.	In4
		sometimes we'll be doing some work with a design team to	
173	Work with internal teams	develop a new vision or strategy for the team itself.	ln4
		then there's various things about, well, we'll work with the design	
		director and their leadership team to develop a sort of internal	
		strategy for that team and figure out how they're going to execute	
174	Work with leadership	on that, what capabilities they're missing, things like that.	In4
	168 169 170 171 172 173	167 No steady stream of work  Too large focus on tangile skills within ID  Ability to work across silos and synthesize  Hiring smart designers over other 170 fields  171 No interfering with execution  172 Importance of story telling in strategy 173 Work with leadership	internally".  So I think there's still a good fit, but it's in the nature of strategic work that there isn't a steady stream of it you know. So strategic projects are they come around infrequently, you know, because these companies spend a lot of time executing on the strategy.  I'm a massive fan of industrial designers and I think industrial designers really underrate their skills. They tend to focus too much on the tangible skills, the sketching, the CAD renderings, all that kind of stuff, the beautiful details or whatever.  Good industrial designers, they've got an amazing kind of ability to really work across the silos and synthesize things together into something practical.  So after a few experiments with very smart people from a mixture of sort of technical and sort of more social science backgrounds, I've gone back to just looking at hiring really smart designers and then showing them how to be a bit more strategic.  We try not to go too far because we know that execution designers are much better than we are about that and we respect their expertise.  I think that one of the most important ones is how to thread together. The strategic story and how to then articulate that, how to communicate that in an engaging way.  sometimes we'll be doing some work with a design team to develop a new vision or strategy for the team itself.  then there's various things about, we'll work with the design director and their leadership team to develop a sort of internal strategy for that team and figure out how they're going to execute

Strategic Work Types	176	Work when clients are stuck	they want to cut their carbon footprint by 25%. And that means they've got to radically change a particular product. They can't.	In4
Strategic Work Types	177	Unpack the problem and provide some directions	And it's a really high risk, important strategic project and they asked us to help them frame the problem, unpack the different dimensions and tensions within the problem because it's highly constrained problem and then come up with a vision or what they call the manifesto for it and some starter ideas to kick off the ideation.	In4
Strategic Work Types	178	Providing a guiding North star	the most important part of it is a kind of very ambitious kind of vision statement that is both facing the design and innovation team that gives them a bit of a North star to guide their ideation work, but also it's to communicate to the senior executives what this project's about.	In4
Strategic Work Types	179	Portfolio planning	Related to that we'll also get involved in planning new portfolios or lines of portfolios, for example.	ln4
Strategic Work Types	180	Design Language	So we'll do that, we call it experience strategy, other people call it design language or design identity strategy. So we typically do some analysis, come up with a vision and some principles, often you know Co-created with their design team.	In4
Positioning	181	Bracketed as design thinkers	weirdly, you know, lots of people think of us at Plan as design thinkers, because we're not designed doers. So we still get kind of bracketed as that.	In4
Challenges	182	Design thinking degrades the design discipline	it degrades the design discipline. To be frank, I think it still did some damage, yeah.	ln4
Challenges	183	Not even studying make one neccessarily a good designer	I went through a four year design degree in one of the top courses on the planet. And plenty of people went through that course who weren't competent designers.	In4
Challenges	184	Two-day design thinking courses	So the thought that you could do a sort of two day course and become a designer was ridiculous, you know?	ln4

			But now there's a lot more awareness of different types of	
Context	185	Awareness around strategic tools	strategic projects and strategic tools and things like that.	In4
Clients Requests	186	More knowledgeable clients	I think if they came now, it'd be a more detailed brief: "We want you to do this, we want you to do that." You know, there would still be flexibility about how to design the process, but there's definitely a more knowledgeable client right now.	
Client Relationship	187	Sporadic projects with clinets	you'll just stay in touch with them after that and hope that there'll be more projects on the way. But I very rarely have relationships with clients where, you know, even in between projects they want strategic counseling and things like that. That sometimes happens, but it tends to be they're focusing on execution more after that point.	In4
Positioning	188	Strategic support	I think what we try, is to encourage our clients to own the strategy. So what we see ourselves as is a strategic support rather than "hey you outsource your strategy to us and we'll deliver your strategy".	ln4
Process	189	Co-create the strategy	they just haven't got the time or headspace to do it even if they could do it, but often they also know that they need that external perspective and use us as a sounding board. But then co-create the strategy with them. So they'll still have that ownership of it.	In4
Client Relationship	190	Start-ups lack the budget for strategy	in my experience, most startups have very little budget for consultancies and they also tend to be founded around a vision.	ln4
Context	191	Start-ups are buil around a vision	The whole business is around validating, testing and validating that vision.	ln4
Challenges	192	Start-ups offer mostly equity	I know so many different consultants who have tried working with startups, and all they offer is equity and all the rest of it	ln4

Chronic Morle Terror	100	Droductivation of atrataguages with a	I happen to know one strategic consultancy, they're kind of designers but they're more management consultants who focus on startups. But it's very much around, you know, running workshops with them about how to position, how to organize for the next funding round, all that kind of stuff. And it's very, you know, they've almost productized their offer because they cycle	la 4
Strategic Work Types Positioning		Productization of strategy consulting  Full-service offer	through so many startups  NPK basically flourishes on that mix of making as we say, nice good looking products, engineered to a certain quality level and also ready for production, to get things right into production. I think nowadays you would call that a full service office where basically you can come in with a good idea and a bag of money.	In4
Capablilities		50/50 designers and engineers, with supporting roles	And leave with a I get a product supplied.  we were 50/50 now, half designers, half engineers, with some disciplines on the side, with some graphic design, photography, lots of prototyping, model making Basically, anything that you would need to develop a product in the widest sense.	In5
Diverse Markets		Multinationals and Start-Ups, no middle sized clients	Well, it differs, we worked for large corporations, international/multinationals Heineken, ASML, Kimberly-Clark, Kraft Heinz, the big Ones, but also for very small ones, startups, single person companies and I think, if you would analyze the client group, you would probably see that the midsection is missing. And the reason for that is that usually we're at the core of the product development, which basically means that there is no client internal development party involved.	
Positioning	197	Best when taking on resposibility for whole development	I think we're at our best if we take over responsibility for a certain development, so not just take on a part of it. But really take on responsibility.	In5
Positioning	198	"If you do something, you have to do it really well"	we've learned from the past that if you do something, you have to do it really well.	ln5

Context	100	There used to be no integrated product development	from the past we know that in the early days there was no integrated product development and also not at companies.	ln5
Role Change		the strategic role of designers changed	But what also has changed overtime I think is — I think that's probably also your interest — the strategic role that designers play in that process.	In5
Role Change		designers are involved in many stages of the process	nowadays we've seen that design has changed roles, the position of design has changed and that designers are actually involved in many stages in the process.	
Strategic Work Types	202	At first portfolio strategy	I remember that when I was first seriously, significantly involved in the strategic aspect was in the early 00s. So let's say 20 years ago. With clients that were thinking about how to restructure their portfolio.	In5
Context	203	Changes in the environment as trigger	Nowadays it's got more to do with changes in the environment.	In5
Role Change	204	Societal changes change designers' role	So we see that from societal changes you end up with a new role for the design to play, simply because it's not a defined problem that you start working on, you start from changes in the environment that you have to deal, with without naming from the start what the solution will be or what kind of solution you will end up with.	In5
		No product innovation without	years ago, I was collaborating with a management consultancy. And they said that you can't do product innovation without change management in the company. Because product innovation always has an impact on the structure of a company. So there you can see that the role of design in that sense is changing a lot because what we do in many ways impacts the way that companies	
Implications	205	change management	behave in their environment.	In5

Implications	206	Solutions impact the company and the context	But the kind of solutions that we're developing impact both the company, in its structure, and also influences the outside world simply because we come up with different solutions that haven't been out there yet. I think if you look over time, the role has significantly changed from solution from a role where we make ready solutions, products, to, in the end still products because we are product makers, but products that have an impact both on the company side and on the societal side. Especially the last thing has, of course, a huge impact on how you behave as a designer.	In5
Implications			you basically see that the design has that influence, that it changes the context. And the context changes design. So it's like a loop, like a Mobius loop that keeps going back and forth where both influence each other. It's not a static situation. For me that's one of the most interesting elements of design. The fact that you are able to actually change the context.	In5
Positioning	208	Design is a change agent	It's a change agent, you could say.	ln5
Process	209	Work needs a theoretical background	at the end of the 90s, I guess it was, where we became aware that what we're offering needs a, let's say, theoretical background or or let's say a model that you work with.	In5
Process	210	Before it was on the basis of experience	Because before that it was mainly I recall it shooting from the hip. You know, you advise clients on the basis of experience without even knowing exactly what it is that you were offering.	In5
Context	211	Selling design became difficult	The selling part became difficult, we found out in the late 90s, early zeros. Because then design was still seen as the profession of making things look nice and not so much as a profession that could do strategic advice.	In5
Process	212	Making knowledge explicit	But what we started doing then is start basically for ourselves, trying to make that knowledge that we had explicit.	In5
Process	213	Explicit knowledge makes things sellable	So the fact that we had to make things explicit actually helped us in making things sellable.	In5

Methods/Tools	214	A new tool for every client	I can always say that for every client we invent a new tool, if necessary.	In5
Capablilities		Less specialized roles to be able to sell more hours	The problem is, the more specific you make roles or functions in a consultancy, the more difficult it gets to sell their time because basically what we do is a consultancy business, we sell hours. That's the main business model, apart from royalties and licenses and that kind of stuff, IP development	In5
Capablilities	216	Pi-shaped designer	So our approach is more that we look for people that have multiple legs to stand on. I think in Delft they would at some point call it Pi-shaped. So you have a knowledge of design and something else.	In5
Capablilities		Strategic but also product capabilities	to make sure that if we don't have enough work in strategic consultancy that they are also good at designing an interesting physical product.	In5
Positioning	218	,	Originally it was like a pure — it's called hour factory, billable by the hour, but quite early on in the process since we were doing projects from start to end, we found ways of getting away from that hourly billing model to creating IP in different ways.	In5
Organizational Changes		Production makes more money than hours	Even up to the stage that we founded a production company ourselves. Because we knew that it's easier to make money from production than from selling hours.	In5
Positioning	220	It does not matter where the profit is made	it doesn't matter where we make a margin, where we make profit on a project as long as there is profit in a project	In5
Challenges		Continuous seearch for new revenue models	We're always looking for different models of dealing with that because it opens up a new field.	In5
Challenges		Lack of financial means to operate that way	over the years I've learned that many design consultancies would like to do an approach like this but are not capable of it simply because they lack the financial means to do so.	In5
Challenges	223	Being able to postpone revenues	we've been around for 45 years, we've built up, let's say, enough financial strength to do so. We can postpone our revenues.	In5

			And at the same time it has supported our existence over time.  Because if we go through a weak period or economic downturn	
Challenges	224	Supported the existence over time	usually the revenue keeps coming in.	In5
Positioning	225	No specialization	we're able to do so because we don't specialize in a specific product group.	In5
Positioning	226	Process driven design process	We never had a focus on any specific product category. We always, always say we were capable of designing almost everything. Because we do it in a structured way. Because we're able to actually collect a lot of information, relevant information, process it and turn it into a decent product design.	In5
Positioning	227	Process is at the core	The process is the core of what we do. That's it.	In5
Positioning	228	Process focus helped to diversify	the process is always leading. And with that process, we can design anything you like. That has helped us in diversifying the portfolio products that we worked on	In5
Positioning	229	Balances out demands	because we focus on different product categories or don't have a specific product category, we try to balance it and there's always one product category that is flourishing while the other one is going down and that helps us to get through difficult times	In5
Clients Requests	230	Public and private clients have similar briefs	I don't think you could divide them, let's say between public and commercial companies. On both sides you see strategic projects and nonstrategic projects.	In5
Client Relationship	231	Focus on returning clients	We have always focused on long term relationships with the clients, because we know that, you know, a client returning or coming back for another project is a simple catch	In5
Relationship Development		Relationship starts with ID, can grow into SD	So usually the relationship starts with a concrete product development. And then once they discover, once the clients discover that there's more knowledge that they can tap into, then usually it extends to a more strategic consultancy. Not always, but in some cases.	In5

Project Type Development	233 SD to II	D happens rarely	to enter at the strategic level and then continue into the more operational level. That's a difficult one. I think that has to do with our reputation.	In5
Role Change	234 Influenc	ce of the image of a designer	I think that's an image problem. Simply because if people think there's a cliche of a designer, what a designer is and what a designer does and the cliche is that it's like an artistic type of person, you know, working on his own, developing his own, his or her own ideas.	In5
Clients Requests		ations of clients	So [with] a designer, you expect a strong opinion or statement. [With] a strategic consultant, you'd probably expect a non biased approach.	In5
Role Change	Profiles 236 and mo	of designers are changing re accepted	that's something that I think that's overtime changing since the profile of designers is changing over the years, more and more people get used to the fact that there's multiple types of designers and some of them are more strategic. And now that notion is developing. Uh, I think it gets more accepted.	In5
Process	"Co-evo	olution of problem and o space"	Kees [Dorst] triggered me many years ago, and it's a sentence that I use very often, something that he calls the "Co-evolution of problem and solution space". And I think for me that's the core of design. Basically stepping back from that old paradigm, where we say: first you have to analyze until [you reach] very thorough analysis, and then you start developing the solution. That doesn't work.	In5
Process	238 Linear a	approach in strategic design	I think also in strategic challenges it doesn't make sense to analyze something to death and only then start working on a solution.	In5
Process		nce between SD consultants ategic consultants	I think that's for me also the big difference between what strategic design consultants do and what strategic consultants do.	In5

Process	240	No designing without analyzing and vice versa	very often doesn't lead to a satisfactory solution simply because you cannot analyze without design and design without analyzing it. It's, you know, it's a loop.	In5
Capablilities	241	"You cannot do strategy without a notion of execution"	The core of this whole thing is actually what we were just discussing. You cannot do strategy without a notion of execution.	In5
Capablilities	242	From strategy execution to formulation	design actually did it the other way around, coming from execution starting to get more involved in strategy simply because we know how execution works?	In5
Capablilities	243	Difficuty to set up strategy without execution knowledge	I think what was really important is that it's very difficult to design to set up a new strategy if you don't know about the struggle of the implementation side of it.	In5
Challenges	244	Lack of execution knowledge	what I see with many of the management consultancies where the young people actually don't have a design background, they have a business background and have really a hard time imagining how things would end up in practice if they come up with new strategies. Simply because they haven't been there.	In5
Process	245	Creating co-ownership	[Design Thinking] is good for actually creating co-ownership within companies, you know, having people involved in developing new ideas and new solutions, that you create ownership somehow within the company by having these people involved. But it doesn't mean that they can actually build the solution or develop a solution.	
1100000	210	ordaing do ownereinp	Preparing people within the company to accept your new	
Process	246	Preparing people within the org.	direction, your new solutions, if they're involved.	In5
Process	247	Beneifits of co-ownership	if they feel responsible for the result, then it's much more likely that they will accept it and help implement it.	In5
Process	248	Involvement in strategy benefits execution	the more you have people involved in strategic challenges, the more aware they are in the practical implementation of design solutions	In5

0 1 1:::::	0.40		For example, I would say if you don't know as a designer what the	
Capablilities	249	Knowledge designers should have	costs are of what you're designing you're not a good designer.	In5
			I always say it's very easy to design something that looks nice.	
			Very easy! That's the easiest thing. The hard thing lies in actually	
			getting that nice design, that nice looking thing, into production,	
			against affordable costs and against the price level so that people	
Challenges	250	Difficulties in design	out there are willing to buy it.	In5
			that's again strategy and execution — the impact of business	
		Impact of business decisions on	decisions on the design process are huge and many designers	
Implications	251	design	are not aware of it.	In5
			we train our designers here in thinking that way that they are	
			always right from the start [aware of] what the business	
			implications of their design decisions are. And that you cannot	
		Business implications of design	make a decent design without knowing what the implementation	
Implications	252	decisions	implications are.	In5
			as a designer, you have to be aware that there's there's things	
			that you can change, that you can actually adjust your approach	
Capablilities	253	Awareness of parameters	and adjust your design to meet the other goals.	In5
			it's the context and the fact that you add things to the context	
		Adding things to the context changes	changes the context, and then all of a sudden you cannot speak	
Implications	254	the context	about a solution anymore because it's a continuous process.	In5
			designers should be aware of their role in that process, that	
			there's never an end goal. Also in my business here the artifact,	
			the product, is never the end goal. It's a means to an end. Uh, and	
			in best cases you solve most of the challenges, but you usually	
Implications	255	The outcome is never the end goal	don't because you create new ones.	In5
			· · · · · · · · · · · · · · · · · · ·	

Client Relationship	256	Development of strategic discussions	if you can have that strategic discussion with clients about, "OK, look, we're now focusing on that one single product, but you are aware of course that once we start changing your portfolio that the whole thing will change". And then you're in a strategic discussion. And then automatically you run into the next problem and the next challenge and the next type of discussion.	In5
Client Relationship	257	Shaking things up	we're external consultants. So we're usually asked to shake things up. Because it's, uh, I would say that it's an incident, they invite us for an incident. Even if it's long term relationships we do have peaks of involvement.	ln5
Challenges	258	Lack of efficiency of shaking things up	And bit by bit, you're making things like less liquid. And you do that simply because that first stage of being able to shake things up is not a very efficient one.	In5
Challenges	259	The timing is off	of course within companies, we see that you know, the time is usually off. You know, they started looking for a "freedom to move" too late.	In5
Challenges	260	Slight disbalance between freeing up and fixing down	We also see that that search process also usually takes too long. Simply because they didn't find the right moment in time to shake things up or to redefine things. So there's always that slight disbalance between freeing up and fixing things in procedures.	In5
Client Relationship	261	Raison d'être of consultants	And probably also for us it's a reason why we exist. Because if everything would be in the right order, they wouldn't need external consultants to bring in some fresh blood and to shake things up.	In5
Capablilities	262	Being able to deal with insecurity	Being able to deal with insecurity. It is a quality that designers have in this whole process and that a lot of people, non-designers, have a hard time with, you know, excepting that you can never put things in strict procedures, predict what's gonna happen and being able to live with that.	In5

Challenges	263	Failure of selling strategy separately	what we've learned is that when we started, when we tried selling strategy as a separate thing in the early zeros it didn't work. And now it works because we embedded it in our normal process.	In5
Ondiiongee		r undro or coming outledgy coparatory	if I have to spend one or two or three weeks of work on that topic, it pays back in the end. So I don't I don't charge for strategy.  Strategy for me is alignment with the client and that alignment	
Strategic Work Types	264	Strategy is alignment	pays back later on.	In5
			I think a large part of the work is going on in SMEs. And they work	
Client Relationship	265	SMEs work in a different way	in a very different way.	In5
Capablilities	266	"Shared vocabulary helps"	The fact that we have a shared vocabulary helps.	In5
			I think in that sense the whole development, most of the	
			development on strategy and design has been about being able	
			to communicate about things and name things make them	
		Design trade in itself hasn't changed	explicit. The trade in itself, the design trade hasn't changed that	
Role Change	267	much	much.	In5
			So in a sense, what the most successful designers in the past	
		Successful designers where always	have been doing was already strategic design or design strategy,	
Role Change	268	strategic	except that they didn't name it that way.	In5
			The challenge always lies in is the business model of design	
			studios here, because it's very difficult to somehow get it	
Challenges	269	Business model is the challenge	financially right.	In5
0111	070		Because you want to do good to the world and to society, but at	
Challenges	270	Doing good while having to pay rent	the same time: Yeah, well, you still simply have to pay the rent.	ln5
			there's a very thin margin in which you can operate as a design studio before going bankrupt. So many cases of doing more than is asked from you leads to a financial loss. And that's challenging. That basically holds back a lot of designers in smaller companies	
			to do things in a different way simply because they cannot afford	
Challenges	271	Very thin margin	to.	In5

			But then in 2012, it was clear that also those companies had to, you know, tighten the belt and they had developed everything they could. And well, we are a small team and they had their own	
Challenges	272	Loss of projects	R&D department. So there is not much to do then.	In6
Role Change		Inventing a client	we invented a client, so we invented the company that was going to produce the product we designed and the studio is still there and it facilitates the company that's producing. Being us too. So it's kind of like having a lot of hats.	In6
Client Relationship	274	Building a technical concept	we were the external designers, the internal R&D was always doing the main technical things. But what we did was to work on the beginning of the project together with them, to build a technical concept with a design appearance in which they were to detail everything further.	In6
Strategic Work Types	275	Quick projects to make the route	So we were always put in for a quick project to make the route: This is where we're going to and always in cooperation with R&D, within the frame they wanted to have it	In6
Strategic Work Types	276	Accompanying a project	It's like being a train beside another train and sometimes stepping in and something. Yeah, that's what a small team can do. And that's quite a lot.	In6
Strategic Work Types	277	Pitching to leadership	Or we were used by someone internal that had an idea that they couldn't get through the management.	In6
Positioning	278	Sailing the ocean with a small boat	you can sail the ocean with a big ocean ship but you can also sail the ocean with a small boat. And I think our strategy was to just sail with the small boat, being a little bit vulnerable, but then you can go wherever you want.	In6
Capablilities	279	Learning on the job	The training well, our vision is that you learn to design on the costs of the customer, not the school. So whatever we were prepared for was not what we did afterwards. We just do it on the job, learn on the job.	In6

Role Change	280	Realistic in expectations	So we're more realistic in expectation and we have more insight into what's logical to change with respect to the design and what is not really bringing a lot.	In6
Implications	281	Understanding the implications of design changes	you have more feeling with the influences of what the design change will bring. And you're better at weighing that balance, I think.	In6
Implications	282	Understanding the business perspective	having these insights makes you design in a better way because you know better how to get a good mechanical construction with moving parts that is not going to fail. You learn. So it's very, very fruitful in that way.	In6
Process	283	The product and result are leading	Be critical because clients are complaining. I mean, you're becoming humble in that sense, like it has to work. It has to be perfect. It's not you that has the perfect idea. The product is leading and the result is leading.	In6
Process		It is never "it"	we learn now and in the company that it's actually very hard to come there where you can say "this is it". [laughs] It's never "it", but there comes a point that you have to make it finish because there's no time because you have to make decisions and you know it's never going to be 100% good.	In6
Process	285	Compromising and balancing requirements?	we were sometimes mad because they made it too thick or too "something". And now we learn like, yeah, it has to be sometimes a little bit less nice because otherwise it doesn't work.	In6
Capablilities	286	Improved iterations	I think our iteration has improved. We're better in iterating and quicker in iterating. Seeing it quicker that we have to iterate and change things strategically.	In6
Capablilities	287	Thinking better ahead	So we are quicker in deciding which way to go because we know more [] If you know more than you can better think ahead. It has to do with thinking ahead because even if it's not there yet.	In6

Capablilities	288	Practice to improve skills	I think the doing improves the design. So it's not just theory. You have to practice in order to improve the skills. You have to put into practice what you preach.	In6
Challenges	289	"Boxing against boundaries"	in the beginning of our design company, we always got this quite framed commissions. Like, "this is the target. This is what has to be in there. Make it nice". It was very limited and we were always boxing against boundaries to get it more on a higher level.	In6
Challenges	290	The problem of what to choose	And now he says I've got the whole opportunity field and now the problem is what to choose? So that's basically the difference.	In6
Capablilities	291	Knowing more about the context helps	But knowing more about the context makes you better capable of doing that.	In6

## Appendix E - Codebook Tertiary Code Cycle

		Code book			
	"How do small to midsize industrial design practices address strategic challenges?"	RQ			
		Num			Sour
Themes	Category	ber	Code	Quote	ce
Interest and ambition over skills	Capablilities	25	Strategy work is about attitude not capability	[growing capabilities?] I think it's more of an attitude thing. So the people that work here are really ambitious and they are really already looking and asking about these kinds of things	ln1
	Capablilities	40	Strategy deosn't require special skills	I don't feel like you need certain skill sets or something to do it [strategy]	In1
	Capablilities	170	Hiring smart designers over other fields	So after a few experiments with very smart people from a mixture of sort of technical and sort of more social science backgrounds, I've gone back to just looking at hiring really smart designers and then showing them how to be a bit more strategic.	In4
	Capablilities	215	Less specialized roles to be able to sell more hours	The problem is, the more specific you make roles or functions in a consultancy, the more difficult it gets to sell their time because basically what we do is a consultancy business, we sell hours. That's the main	In5

				business model, apart from royalties and licenses and that kind of stuff, IP development	
				I also think that different designers are interested in this also. Are capable of doing so, but it usually depends a little bit on also the AMBITIOUSNESS or	
	Capablilities	41	Intrest as a prerequisite	the way you are, the way you think	ln1
The power of visualization	Capablilities	33	Visualization skills as strength	I think what our power is [] that we can really visualize the ideas directly	ln1
	Capablilities	34	Focus on visualization over processes	I think they [business consultants] are more focused on processes and only on processes and not so much on the products and how to improve the products and to quickly visualize the ideas that you have	In1
				that just makes it really insightful for the company bosses basically to see so that we can understand that there is an issue. Or we can maybe find links to different places and that also helps to organize	
	Capablilities	36	the power of visualization	thoughts.	In1
Individual capabilities	Capablilities	78	People change the organization (studio)	it's a very natural process where also the people coming in bring of course also other expertise which is changing our organization	In2
	Capablilities	216	Pi-shaped designer	So our approach is more that we look for people that have multiple legs to stand on. I think in Delft they would at some point call it Pi-shaped. So you have a knowledge of design and something else.	In5
	Capablilities	168	Too large focus on tangile skills within ID	I'm a massive fan of industrial designers and I think industrial designers really underrate their skills. They tend to focus too much on the tangible skills, the sketching, the CAD renderings, all that kind of stuff, the beautiful details or whatever.	In4

Capablilities 142	Difficulty to have multidisciplinary staff	it is a challenge that you have companies like Frog or IDEO that are very big and they have like very multidisciplinary staff. And as a smaller studio it's quite difficult to get from point A to B, so although we definitely have a lot of, especially on the specific topic of mobility, enough competence, it's it's harder to, what I mentioned earlier, to have have that have like a CV of people to be able to sell that into companies.	ln3
Capablilities 129	Capability of the founder	Well, that's mainly as one of the founders my capability to know a lot about mobility developments and what's going on in the world and that end.	In3
Capablilities 217	Strategic but also product capabilities	to make sure that if we don't have enough work in strategic consultancy that they are also good at designing an interesting physical product.	In5
Capablilities 132	Adding credibility to a team	And so that was a project that we thought that it would have been better to have somebody in the team that has like a credible record	In3
Capablilities 262	Being able to deal with insecurity	Being able to deal with insecurity. It is a quality that designers have in this whole process and that a lot of people, non-designers, have a hard time with, you know, excepting that you can never put things in strict procedures, predict what's gonna happen and being able to live with that.	In5
Capablilities 253	Awareness of parameters	as a designer, you have to be aware that there's there's things that you can change, that you can actually adjust your approach and adjust your design to meet the other goals.	In5
Capablilities 249	Knowledge designers should have	For example, I would say if you don't know as a designer what the costs are of what you're designing you're not a good designer.	ln5

	0 1 1999	400	Ability to work across silos and	, ,	
	Capablilities	169	synthesize	things together into something practical.	In4
				it's like a semi-government organization. So they want	
				everything to be presentable to their higher	
				management and of course nobody's really interested	
Capabilites of the			General consensus over	in the opinion of some kind of designer, but it really	
studio	Capablilities	133	individual opinion	should be what the general consensus is.	In3
				we were 50/50 now, half designers, half engineers,	
				with some disciplines on the side, with some graphic	
			50/50 designers and	design, photography, lots of prototyping, model	
			engineers, with supporting	making Basically, anything that you would need to	
	Capablilities	195	roles	develop a product in the widest sense.	In5
	Горин			The core of this whole thing is actually what we were	
			"You cannot do strategy	just discussing. You cannot do strategy without a	
	Capablilities	241	without a notion of execution"	notion of execution.	In5
	Сарабіннос		Without a field of excedition	design actually did it the other way around, coming	1110
			From strategy execution to	from execution starting to get more involved in strategy	
	Capablilities	2/12	formulation	simply because we know how execution works?	In5
	Capabilities	242	Iomidation	I think what was really important is that it's very difficult	_
			Difficulty to got up atratagy	, ,	
	Conoblities	040	Difficuty to set up strategy	to design to set up a new strategy if you don't know	1
	Capablilities		without execution knowledge	about the struggle of the implementation side of it.	In5
	Capablilities	266	"Shared vocabulary helps"	The fact that we have a shared vocabulary helps.	In5
				The training well, our vision is that you learn to design	
				on the costs of the customer, not the school. So	
				whatever we were prepared for was not what we did	
	Capablilities	279	Learning on the job	afterwards. We just do it on the job, learn on the job.	In6
				I think our iteration has improved. We're better in	
				itanatina and evidencia itanatina. Casina it evidenciale that	
				iterating and quicker in iterating. Seeing it quicker that	

	Capablilities	287	Thinking better ahead	So we are quicker in deciding which way to go because we know more [] If you know more than you can better think ahead. It has to do with thinking ahead because even if it's not there yet.	In6
	Capablilities	288	Practice to improve skills	I think the doing improves the design. So it's not just theory. You have to practice in order to improve the skills. You have to put into practice what you preach.	In6
	Capablilities	291	Knowing more about the context helps	But knowing more about the context makes you better capable of doing that.	In6
	Capablilities	143	Being able to afford experts	And it's also not so easy to hire a couple of people if you're like a 10 or 15 designers firm, then you cannot just hire five people that are psychologists, MBA or whatever they do before even selling the work. So that's the chicken or the egg.	In3
				with the whole company we have 30 projects or something running at the same time. So it's sometimes difficult to [] take the step down and make space for	
Struggling to find time	Challenges	24	It's challenging to take the time		In1
	Challenges	73	Input of society into assigments often neglected	often what society feels is meaningful is not brought into that equation of these big assignments	ln2
Internal challenges	Challenges	74	Making these assignments a societal issue	we are mainly interested in: how can you make these big societal assignments, like the energy transition, a societal issue instead of a quantitative, goal oriented policy push	In2
	Challenges	86	Lack of theoretical knowledge at agencies	I think that's often lacking with a lot of strategic agencies, that they don't have the theoretical knowledge at all to be sure that [they are] a little bit moving into the right direction. They don't have a clue.	In2

Challe	ngos 100	Stategists avoid giving answers to those questions	I think to be honest, that the strategic people, also within industrial design engineering, are really good at not giving answers to these fundamental kinds of questions.	ln2
			And then there was also a project where we were a bit hitting the boundaries of our own expertise like that we can say a lot of things. But to really be believable and	In3
Challe		Hitting boundaries  Strategic work is hard to scale	that respect you need also for a certain credibility.  there's another problem for small consultants, I think as well as or the type of work I do anyway, it's quite hard to make use of junior/midway people because it's "high octane work". It's quite hard to scale.	In4
Challe	nges 152	Hard to delegate	So when we get busy, I would get super busy, but there would be lots of other people around me that wouldn't be so busy. And if it was a research heavy project, that's fine, but if it's requiring lots of strategic creativity and judgment, it's very hard to delegate that and I find it quite hard to find people at the right level.	In4
Challe	nges 159	Right thing to say vs right thing for the business	that would sometimes bring contradictions or tensions, because I would sometimes feel like the right thing to do would be to say "there isn't a good opportunity here. You should stop. I wouldn't invest any more money in this." That would be the right thing to say. But that would be the wrong thing for the rest of the business, because that would be saying no to work.	In4
Challe	nges 182	Design thinking degrades the design discipline	it degrades the design discipline. To be frank, I think it still did some damage, yeah.	ln4
Challe	nges 183	Not even studying make one neccessarily a good designer	I went through a four year design degree in one of the top courses on the planet. And plenty of people went through that course who weren't competent designers.	ln4

	Challenges	184	Two-day design thinking courses	So the thought that you could do a sort of two day course and become a designer was ridiculous, you know?	In4
	Challenges	244	Lack of execution knowledge	what I see with many of the management consultancies where the young people actually don't have a design background, they have a business background and have really a hard time imagining how things would end up in practice if they come up with new strategies. Simply because they haven't been there.	In5
	Challenges		Difficulties in design	I always say it's very easy to design something that looks nice. Very easy! That's the easiest thing. The hard thing lies in actually getting that nice design, that nice looking thing, into production, against affordable costs and against the price level so that people out there are willing to buy it.	In5
	Challenges	289	"Boxing against boundaries"	in the beginning of our design company, we always got this quite framed commissions. Like, "this is the target. This is what has to be in there. Make it nice". It was very limited and we were always boxing against boundaries to get it more on a higher level.	In6
	Challenges	290	The problem of what to choose	And now he says I've got the whole opportunity field and now the problem is what to choose? So that's basically the difference.	In6
Steady work and steady income are still challenges	Challenges	150	Strategic projects tend to get cut	I've recently made a decision to because we've had a tough couple of years. And when the going gets tough and there's COVID or there's recessions looming, strategic projects tend to get cut. They tend to be seen as kind of slightly luxury projects	In4

Cha	allenges 156	Execution is more crisis resistant	And the execution work still needs to happen in a recession or COVID times. I tend to focus on the big pure strategy projects which are kind of more interesting, but they're easier to cut because they're less, some of them are less connected to a particular piece of execution.	ln4
Cha	allenges 160	Easier to win strategic projects	But it was quite hard to win those strategic projects, when you're quite a small company and it was easier for me to win the strategy work than it was for him to win the design work.	In4
Cha	allenges 167	No steady stream of work	So I think there's still a good fit, but it's in the nature of strategic work that there isn't a steady stream of it you know. So strategic projects are they come around infrequently, you know, because these companies spend a lot of time executing on the strategy.	In4
Cha	allenges 192	Start-ups offer mostly equity	I know so many different consultants who have tried working with startups, and all they offer is equity and all the rest of it	ln4
Cha	allenges 221	Continuous seearch for new revenue models	We're always looking for different models of dealing with that because it opens up a new field.	In5
Cha	allenges 222	Lack of financial means to operate that way	over the years I've learned that many design consultancies would like to do an approach like this but are not capable of it simply because they lack the financial means to do so.	In5
Cha	allenges 223	Being able to postpone revenues	we've been around for 45 years, we've built up, let's say, enough financial strength to do so. We can postpone our revenues.	In5
Cha	allenges 224	Supported the existence over time	And at the same time it has supported our existence over time. Because if we go through a weak period or	In5

			economic downturn usually the revenue keeps coming in.	
Challenges	258	Lack of efficiency of shaking things up	And bit by bit, you're making things like less liquid. And you do that simply because that first stage of being able to shake things up is not a very efficient one.	In5
Challenges	259	The timing is off	of course within companies, we see that you know, the time is usually off. You know, they started looking for a "freedom to move" too late.	In5
Challenges	260	Slight disbalance between freeing up and fixing down	We also see that that search process also usually takes too long. Simply because they didn't find the right moment in time to shake things up or to redefine things. So there's always that slight disbalance between freeing up and fixing things in procedures.	In5
Challenges	263	Failure of selling strategy separately	what we've learned is that when we started, when we tried selling strategy as a separate thing in the early zeros it didn't work. And now it works because we embedded it in our normal process.	In5
Challenges	269	Business model is the challenge	The challenge always lies in is the business model of design studios here, because it's very difficult to somehow get it financially right.	In5
Challenges	270	Doing good while having to pay rent	Because you want to do good to the world and to society, but at the same time: Yeah, well, you still simply have to pay the rent.	In5
Challenges	271	Very thin margin	there's a very thin margin in which you can operate as a design studio before going bankrupt. So many cases of doing more than is asked from you leads to a financial loss. And that's challenging. That basically holds back a lot of designers in smaller companies to do things in a different way simply because they cannot afford to.	In5

	Challenges 27	2 Loss of projects	But then in 2012, it was clear that also those companies had to, you know, tighten the belt and they had developed everything they could. And well, we are a small team and they had their own R&D department. So there is not much to do then.	In6
A good relationship with the client is key for recurring projects as well as moving up	Client	Client relationship determines	It depends on how well we know the clients [] the better we know them, the more we think with them and the better we know their market as well and we help	
to the front end	Relationship	the type of work	them to strategize for their market.	ln1
	Client Relationship 1	They are involved in the development of the brief	But in a lot of cases when we [] get the question of making a product design for us [the client], we are also already strategically involved, but it's more in the process before the brief gets done	In1
	Client	1 Aiming for returning clinets	we're aiming at long term relations and we're aiming at companies that do have this repetition on new projects [] we always try to develop together with our clients	
	Client	Complementary capabilities to cllients'	usually our clients have mechanical engineering for instance or marketing. And then yeah, they hire us to do the design work	ln1
	Client Relationship 3	Executives like to discuss strategy	they [CEOs & CTOs] really like to talk about high level strategies and they really like to discuss this because they don't always have a lot of people in their company that are able to do this.	In1
	Client	Organizations live in their own	a lot of organizations, they live kind of inside of their own reality where they simplify the world	ln2
	Client	Org.s might not like unpleasant interactions	So if you want to create pleasure in an organization and we come in later and we do something and those people say, God dammit, this is difficult, so we really	In2

			have to get our brains around it, then people get disappointed and they want to go back to the pleasure they experienced before.	
Client Relationship	61	Studios set standards of interaction	So, the funny thing is, in doing what a lot of other studios are doing, you really destroy something. You can't go back anymore. You create a point of no return.	ln2
Client Relationship	68	Depature from term "client"	we don't want to talk about clients anymore, because it's stupid. Because in the word client is already a power relationship hidden.	ln2
Client Relationship	69	Defining a common assignment of a shared responsiility	we're interested in the outside world. And based on that shared interest, you can define not a project, but you can define a common assignment of a common responsibility you want to share.	In2
Client Relationship	100	Alination in the beginning	I think a good strategic consult in principle creates alienation in the beginning. And then of course you can come up with all kinds of communication tools to make that alienation as comfortable as possible, but that's the second step.	In2
Client Relationship	122	Partner in development	that was always the case that you are very much a partner in the development.	ln3
Client		SMEs can also be interested	So that's very different than like a commercial enterprise where if you have a click with the decision makers and you were very opinionated on some thing and that specific person believes in you then that's enough. But that works very differently than a	
Relationship	134	in individual opinion	government organization or a large company.	In3

Client Relationship 14	Designers were treated like 4 adolescents	And by the end of that experience I was quite frustrated with industrial design because even though I liked it, I was aware that designer — at that time, I'm not saying that's the case now, but at that time in the late 80s, early 90s — designers were treated a little bit like adolescents. You know, they were kept away from important decisions, important meetings and treated like teenagers and basically told to make something pretty after all the important decisions have been made.	In4
Client Relationship 14	Engineers were taken 5 seriously	I had the experience of being an engineer, where you were taken seriously.	ln4
Client	6 Higher status of externals	in reality external consultants just have higher status and then internal people they often use us [in a way] where they go "we kind of know what to do. We want your second opinion but we know that you'll be listened to you more than if we if we say it internally".	In4
Client Relationship 17	1 No interfering with execution	We try not to go too far because we know that execution designers are much better than we are about that and we respect their expertise.	In4
Client	7 Sporadic projects with clinets	you'll just stay in touch with them after that and hope that there'll be more projects on the way. But I very rarely have relationships with clients where, you know, even in between projects they want strategic counseling and things like that. That sometimes happens, but it tends to be they're focusing on execution more after that point.	In4
		in my experience, most startups have very little budget	
Client	Start-ups lack the budget for	for consultancies and they also tend to be founded	ln4
Relationship 19	0 strategy	around a vision.	In4

Client Relati	Focus on returning clients	We have always focused on long term relationships with the clients, because we know that, you know, a client returning or coming back for another project is a simple catch	In5
Client Relati	Development of strategic discussions	if you can have that strategic discussion with clients about, "OK, look, we're now focusing on that one single product, but you are aware of course that once we start changing your portfolio that the whole thing will change". And then you're in a strategic discussion. And then automatically you run into the next problem and the next challenge and the next type of discussion.	. In5
Client Relati	Shaking things up	we're external consultants. So we're usually asked to shake things up. Because it's, uh, I would say that it's an incident, they invite us for an incident. Even if it's long term relationships we do have peaks of involvement.	In5
Client Relati	Raison d'être of consultants	And probably also for us it's a reason why we exist. Because if everything would be in the right order, they wouldn't need external consultants to bring in some fresh blood and to shake things up.	In5
Client Relati	SMEs work in a different way	I think a large part of the work is going on in SMEs.  And they work in a very different way.	ln5
Client	Building a technical concept	we were the external designers, the internal R&D was always doing the main technical things. But what we did was to work on the beginning of the project together with them, to build a technical concept with a design appearance in which they were to detail everything further.	In6

Clients learn more and more to use designers better	Clients Requests	13	It's strategic when the client frames it that way	I think if they [the client] really make it [] an assignment [it] becomes strategic. If they really ask us to do work in this.	ln1
	Clients Requests		It's strategic when the client frames it that way	that's also a little bit of strategy, but we don't really call that strategy projects, we call it strategy projects when they ask us: Can you strategize for us what to do?	In1
	Clients Requests	64	Org.s want it as cheap as possible	that's of course opposite of how organizations work because time is money and money is something where they say, "OK we want to be willing to do it as cheap as possible".	In2
	Clients Requests	119	More clients are now complete newcomers	because of the introduction of technology, connectivity and such that now we get more and more clients that don't know anything at all, so that are like newcomers in the markets.	In3
	Clients Requests	120	Whole package	So they are interested in the whole package. We also talked to partner companies that do the connectivity or the engineering or the manufacturing. So normally we bring them in at clients request but we're also evaluating if we should make that a more structural position to the market as well.	In3
	Clients Requests	121	Start.ups see potential in societal developments	the startups are newcomers in the markets in general, they see general developments in society or the market that they see potential, but they typically don't have the experience, whereas clients like Mobike or lyft, they do have their in-house capabilities, but they are more looking for the specific expertise to expand that.	In3
	Clients Requests		More knowledgeable clients	I think if they came now, it'd be a more detailed brief: "We want you to do this, we want you to do that." You know, there would still be flexibility about how to	In4

				design the process, but there's definitely a more knowledgeable client right now.	
	Clients Requests	230	Public and private clients have similar briefs	I don't think you could divide them, let's say between public and commercial companies. On both sides you see strategic projects and nonstrategic projects.	In5
	Clients Requests	235	Expectations of clients	So [with] a designer, you expect a strong opinion or statement. [With] a strategic consultant, you'd probably expect a non biased approach.	In5
Openius vitus in at the			There is eally reality, as		
Complexity is at the core of reality	Complexity	57	There is only reality, no ill-defined things	people who say that things are ill defined, don't understand that it's not ill defined. It's just reality	ln2
	Complexity	58	"it is defined, but it is very complex"	it is defined, but it is very complex	ln2
	Complexity	98	Sweet spot of enough but not too much complexity	It's sense making and you have to look for an optimum. You have to look for a sweet spot where if you make it more complex it doesn't add anything to your understanding and when you make it less complex you lose information.	In2
	Complexity	99	Org.s need time to adapt to complexity	it is this adaptive cycle. So you create something new and then you know there will be a collapse because people don't It's just too complex for them to understand it immediately, but they need the time to embrace it or to start embracing it.	In2
	Complexity		Everything is ill-structured	in principle everything is ill structured, even this chair. So the Eames chair. So if I lift it up, I can In this object there are so many wicked problems! So it's everywhere. It's not only strategy making, but it's everywhere.	In2

	Complexity 10	There are no wicked problems, just reality	we have to get rid of this whole idea of wicked problems. Bullshit. Because in principle the world is like that.	ln2
	Complexity 1	"wicked" takes responsibility 1 away	when you use something as a "wicked problem" you, in a way, also distance yourself from the responsibility dealing with that complexity, because you say it's wicked, so it might go wrong.	ln2
Changes in the context are triggers for internal change		7 External changes	And so that was a bit of an outside development also because at that point in time, we also saw that a lot of companies build up their own in-house capabilities on that end, and so a lot of clients that we worked with more and more did the engineering and pre production in-house.	In3
	Context 13	Development to in-house design teams	an overall development is a bit that, for example in tech, that everybody builds up their own in-house design expertise, so that is a bit of a challenge for the agency world.	In3
	Context 14	0 Internal expertise is wanted	Also, there you see also like in the venture world, investors always want the companies to have internal expertise. So that's also a bit a trend over here.	ln3
	Context 16	ID became core competency	another thing that's happening in the industry was that industrial design was becoming an absolute core competency	In4
	Context 16	3 "push to in-house ID"	back 20 years ago, there was a big push to in-house industrial design, so suddenly there were a lot more serious industrial design teams there. But at the time very light research and strategy people.	In4

	Context	165	Even researchers in-house	now they'll typically have some kind of research and strategy people in the team as well. So we don't tend to focus too much on the research work so much anymore because they'll often have particularly kinds of user researchers.	ln4
	Context	185	Awareness around strategic tools	But now there's a lot more awareness of different types of strategic projects and strategic tools and things like that.	In4
	Context	191	Start-ups are buil around a vision	The whole business is around validating, testing and validating that vision.	In4
	Context	199	There used to be no integrated product development	from the past we know that in the early days there was no integrated product development and also not at companies.	In5
	Context	203	Changes in the environment as trigger	Nowadays it's got more to do with changes in the environment.	In5
	Context	211	Selling design became difficult	The selling part became difficult, we found out in the late 90s, early zeros. Because then design was still seen as the profession of making things look nice and not so much as a profession that could do strategic advice.	In5
Small fraction of their projects is strategic	Distribution Strategy/Executio n	10	Small fraction of their projects is strategic	But that's maybe 5% of our assignments or something like this	ln1
Diversifying in merkets					
Diversifying in markets and client types	Diverse Markets	1	They work in different markets	how we work is applicable to a lot of different markets	ln1
	Diverse Markets	3	they "don't limit it to certain markets."	we don't limit it to certain markets.	ln1

	Diverse Markets	149	Focus on big companies	We focus on big companies, in consumer tech and mobility.	ln4
	Diverse Markets	196	Multinationals and Start-Ups, no middle sized clients	Well, it differs, we worked for large corporations, international/multinationals Heineken, ASML, Kimberly-Clark, Kraft Heinz, the big Ones, but also for very small ones, startups, single person companies and I think, if you would analyze the client group, you would probably see that the midsection is missing. And the reason for that is that usually we're at the core of the product development, which basically means that there is no client internal development party involved.	
It is important to be aware of the implications of the design outcome	Implications	205	No product innovation without change management	years ago, I was collaborating with a management consultancy. And they said that you can't do product innovation without change management in the company. Because product innovation always has an impact on the structure of a company. So there you can see that the role of design in that sense is changing a lot because what we do in many ways impacts the way that companies behave in their environment.	In5
	Implications	206	Solutions impact the company and the context	But the kind of solutions that we're developing impact both the company, in its structure, and also influences the outside world simply because we come up with different solutions that haven't been out there yet. I think if you look over time, the role has significantly changed from solution from a role where we make ready solutions, products, to, in the end still products because we are product makers, but products that	In5

			have an impact both on the company side and on the societal side. Especially the last thing has, of course, a huge impact on how you behave as a designer.	
Implicatio	ns 207	Design changes the context and vice versa	you basically see that the design has that influence, that it changes the context. And the context changes design. So it's like a loop, like a Mobius loop that keeps going back and forth where both influence each other. It's not a static situation. For me that's one of the most interesting elements of design. The fact that you are able to actually change the context.	In5
Implicatio	ns 251	Impact of business decisions on design	that's again strategy and execution — the impact of business decisions on the design process are huge and many designers are not aware of it.	In5
Implicatio	ns 252	Business implications of design decisions	we train our designers here in thinking that way that they are always right from the start [aware of] what the business implications of their design decisions are. And that you cannot make a decent design without knowing what the implementation implications are.	In5
Implicatio	ns 254	Adding things to the context changes the context	it's the context and the fact that you add things to the context changes the context, and then all of a sudden you cannot speak about a solution anymore because it's a continuous process.	In5
Implicatio	ns 281	Understanding the implications of design changes	that balance, I think.	In6
Implicatio	ns 282	Understanding the business perspective	having these insights makes you design in a better way because you know better how to get a good mechanical construction with moving parts that is not going to fail. You learn. So it's very, very fruitful in that way.	In6

Methods and Tools might have a base framework, but need to be developed for every project	Methods/Tools	20	Methods change depending on the challenge	"And do you have specific approaches or methods that you use for these strategic challenges?" "No" "It's just depending on whatever the?" "It's always different, yeah"	In1
	Methods/Tools	35	Visualization of products and processes	it's visualizing in sketches for products, but also in visualizing processes	ln1
	Methods/Tools	43	Methods as a communication aide  Methods in use depend on the	We do have a methodology, so basically a waterfall method which we can use. We usually use it to explain a little bit on what kind of phases you have [] we do have some methods, but it's always different.	ln1
	Methods/Tools	45	case	It's never the same, exactly	ln1
	Methods/Tools		Making new things requires making the required tools	When you really have to make stuff that doesn't exist yet, you constantly have to go through barriers so it's impossible to grab modules from the shelves that already exist, put it together and make a machine.  ViP is I think key to everything because it's kind of a basic structure which still allows for a lot of exploration.	
	Methods/Tools  Methods/Tools		ViP as basic structure  Frameworks need to give freedom	So it's a framework that gives us freedom.  if we have frameworks that give us freedom, then it's fantastic. If the framework is gonna be dogma it is withholding us [from] growing then we are on the wrong track.	In2
	Methods/Tools		Strategic design tools lack often theoretical backing	tools like working with Personas, which I think is completely bullshit from a theoretical point of view. And a lot of consultants and strategic consultants use those kinds of tools.	
	Methods/Tools	91	Personas need to be used differently	I think you can use personas, but not how they are being used.	ln2

	Methods/Tools	92	Outcomes show the limitations of the tools	when the method starts to create constraints then you really have to be careful. you see it literally in the design of the products that you [can] see the limitations of the tools that were being used. And I think that's fair and that also applies to strategic tools or roadmapping tools or whatever, so	In2
	Methods/Tools	93	Org.s need to be aware of limitations of tools	I think in the end, of course, you can't avoid it, but if you don't even talk about it yourself, as an organization, that you may be limited by the tools you use then I think you're on the wrong path.	In2
	Methods/Tools	172	Importance of story telling in strategy	I think that one of the most important ones is how to thread together. The strategic story and how to then articulate that, how to communicate that in an engaging way.	In4
	Methods/Tools	214	A new tool for every client	I can always say that for every client we invent a new tool, if necessary.	In5
Experimentation in organizational structures	Organizational Changes	28	Organizational change for these workshops	That really helped them organize and we are trying actually right now to also do this for different companies, we call this the scope design lab	In1
	Organizational Changes	114	Changes of the studio and focus	through the years we have also had different sizes and the waves of the world, and the economy, and all the other departments and also That, at a certain point, we more and more decided to focus on the new mobility design.	In3
	Organizational Changes	80	Important guidelines in the studio	we didn't have to change our organization, but there are these very important guidelines within our organization	In2

	Organizational Changes	123	Experiments with business models	in our career we experimented a lot with different business models as well. So if it's like in the royalty model or or venture model to to even invest in companies or even start up our own initiatives, that's the entrepreneurial part of the development process is something we've always done.	In3
	Organizational Changes	153	Switch to virtual agency	I've recently made a decision to switch from a sort of full-time team to what I call a virtual agency. So I now work with quite a few of my ex team are now freelancers but it gives me the flexibility to build teams that are really good for a particular job	In4
	Organizational Changes	219	Production makes more money than hours	Even up to the stage that we founded a production company ourselves. Because we knew that it's easier to make money from production than from selling hours.	In5
The people make the organization	Organizational Changes	30	No need for different workforce	So we did do a little bit of organizational changes, but I believe that we have the right people to do these kinds of projects, so we don't really need to change, we don't need to hire different people or something. Everybody here is a design thinker.	In1
	Organizational Changes	79	Changing people changed the studio.	the organization how it started in the beginning is completely different, simply because of the people that are here. So every time there's a new person coming in, we have another position as an organization.	In2
Positioning within a larger context	Positioning	52	they defend society from organizations	in the end [] we defend society from the organizations we work for	ln2
	Positioning	53	Outcomes are for organizations not society	organizations are really goal oriented [] [and they give you] simplified design assignments So when you in the end come up with something that kind of	ln2

				makes sense, in relation to that simplified assignment, it doesn't mean anything for society	
	Positioning	55	Simplifying benefits the organization, not society	simplifying the world it can be very successful, also in relationship to communication inside of the organization itself and everybody feels comfortable. But in the end society cannot benefit from the organization	In2
	Positioning	70	Seeing the world as something to take resposibility for	So it's not about seeing the world as something that you harvest money from, it is something where you take responsibility for, which is completely different. And in taking the responsibility for That's where the value exchange is going to happen.	ln2
	Positioning	72	Interest in how society reacts to assignments	we are not the experts in [example]. Because that's an expertise of course we do not have. But what we are interested in is how does society relate to an assignment like that?	In2
	Positioning	106	Design is about giving society opportunities	design is not about problem solving, but it's about giving society opportunities.	ln2
Positioning towards clients	Positioning	29	Attempt at selling only strategy	that's something that's a little bit organizational. [] we're trying to basically sell these kinds of projects without what all the other projects normally have in front of it before we do these kinds of things.	In1
	Positioning	49	Specialization is problematic	I think that's exactly where everything goes wrong: that people say you are a designer that does strategy making or you're a designer that makes furniture or	In2
	Positioning	50	Specialization is limiting	Because non-professionals want to understand what you do you give yourself a name or a name tag and therefore you limit your possibilities yourself by doing so.	In2

Positioning	67	Preparing the org. is usually not done	that's something completely different I think, than what consultancy normally is all about because you just sell your consultancy. You want to minimize the investment in the beginning and you want to maximize of course your billable hours.	
Positioning	71	Org.s are necessary to make things happen	constellations of organizations are necessary to make happen what we think is needed in society. I see that as a kind of a dynamic constellation of interrelationships you have to manage.	In2
Positioning	77	"Responsibility to keep things going"	what we do is we take that responsibility to keep things going.	ln2
Positioning	82	Expression of individual agency	I think it's really important that everyone feels empowered to give expression to his or her agency within the organization	ln2
Positioning	89	Defends knowledge, not nice projects	my defense is not that we did a nice project for another organization, but my defense is "this is how we think the world works". So I defend knowledge. I do not defend our own work. That's a completely different position you take as a consultant.	ln2
Positioning	115	Focus on mobility	since 10 years, we really communicated a focus on mobility and also positioned us as a specialist in that field.	In3
Positioning	116	Focus on front end of design	we started in '95 and then we grew at a certain point until a studio of 25, which was for big part also engineering and then we had hit a couple of crisis. So we also had to part with the a larger group of employees and since then we started to focus on the [we] decided to focus on the front end of the design process	In3

Po	ositioning 118	Either design or engineering studio	you either were a design studio or a real engineering studio and like the model to do both is a bit more the 90s model	In3
Po	ositioning 124	Clients make your portfolio	as a consultancy your portfolio is very much determined by your client requests, and, as you probably may know or may not at your age, a lot of projects never make it to the market	In3
Po	ositioning 125	Own initiatives eg. for marketing/positioning	So yeah, well, let's say half of your work doesn't even make it to So that also limits your marketing possibilities. So that's another reason that we have always done a lot of [our] own initiatives that we use for marketing purposes, to present ourselves in a specific segment.	In3
Po	ositioning 141	Working for org.s early in their life cycle	So that also connects a bit to what I was saying in the beginning that you have to work for these companies at the beginning of their life cycle and not if they're really established. And so that also brings different requirements for the studio.	In3
Po	ositioning 154	Offering strategy and execution	I think because most people who do strategy, they do it in the way we did at Seymour Powell where they do the execution but they do the strategy as well	In4
Po	ositioning 155	Positioning vs actual work output	And there's a big difference between how you position yourself, how you market yourself and the actual work that you do. So people might position themselves as strategic, but they still might be doing an awful lot of execution work.	In4
Po	ositioning 158	"Strategic bolt-on to core business"	I was seen really as sort of a business development and strategic bolt-on to their core business.	ln4
	J I	Tightened the positioning	I tightened the positioning of Plan to purely sort of research and strategy and that's when we took off.	In4

Positioning 164	Pivot to strategic design	30 years ago companies would be relying a lot more on consultancies for executional design. 20 years ago they were building the internal teams, so it made sense to work with to pivot to just doing the research and strategy and integrating really well with their internal design teams.  weirdly, you know, lots of people think of us at Plan as	In4
Positioning 18 <sup>2</sup>	Bracketed as design thinkers	design thinkers, because we're not designed doers. So we still get kind of bracketed as that.	ln4
Positioning 188	3 Strategic support	I think what we try, is to encourage our clients to own the strategy. So what we see ourselves as is a strategic support rather than "hey you outsource your strategy to us and we'll deliver your strategy".	In4
Positioning 194	Full-service offer	NPK basically flourishes on that mix of making as we say, nice good looking products, engineered to a certain quality level and also ready for production, to get things right into production. I think nowadays you would call that a full service office where basically you can come in with a good idea and a bag of money. And leave with a I get a product supplied.	In5
Positioning 197	Best when taking on resposibility for whole development	I think we're at our best if we take over responsibility for a certain development, so not just take on a part of it. But really take on responsibility.	In5
Positioning 198	"If you do something, you have to do it really well"	we've learned from the past that if you do something, you have to do it really well.	ln5
Positioning 208	Design is a change agent	It's a change agent, you could say.	In5
Positioning 218	From only billable hours to diversified IP	Originally it was like a pure — it's called hour factory, billable by the hour, but quite early on in the process since we were doing projects from start to end, we	In5

				found ways of getting away from that hourly billing model to creating IP in different ways.	
	Positioning	220	It does not matter where the profit is made	it doesn't matter where we make a margin, where we make profit on a project as long as there is profit in a project	In5
	Positioning	225	No specialization	we're able to do so because we don't specialize in a specific product group.	In5
	Positioning	278	Sailing the ocean with a small boat	you can sail the ocean with a big ocean ship but you can also sail the ocean with a small boat. And I think our strategy was to just sail with the small boat, being a little bit vulnerable, but then you can go wherever you want.	In6
Positioning as process	Positioning	226	Process driven design process	We never had a focus on any specific product category. We always, always say we were capable of designing almost everything. Because we do it in a structured way. Because we're able to actually collect a lot of information, relevant information, process it and turn it into a decent product design.	In5
	Positioning	227	Process is at the core	The process is the core of what we do. That's it.	In5
	Positioning	101	Design is not problem solving	I don't believe in design as problem solving.	ln2
	Positioning	81	the individual works within a framework	we work within kind of a framework and a common understanding what we mean as a group – but in the end, everyone kind of represents his or her own position.	ln2
	Positioning	228	Process focus helped to diversify	the process is always leading. And with that process, we can design anything you like. That has helped us in diversifying the portfolio products that we worked on	In5
	Positioning	229	Balances out demands	because we focus on different product categories or don't have a specific product category, we try to balance it and there's always one product category	In5

				that is flourishing while the other one is going down and that helps us to get through difficult times	
Strategic Design is time consuming, context based and requires experience and a theoretical backing	Process	22	Strategic work is time intensive	It takes a little bit of time before you can develop this strategy, so you're in like, yeah, you're in a lot of brainstorms.	ln1
	Process	23	Slow process	And sometimes it looks like you're not getting anywhere. Uhm, you're just trying to research and that can be a slow process or something and it's important to make sure that you have time for it to get your mind straight.	ln1
	Process	21	Early involvement speeds up the execution	to be able to think along on this because you know if you just get a design brief and you have to do this, then it's more like, OK, just doing what you already thought of. So it's really nice.	In1
	Process	63	Work that makes sense takes time	if you look at the business model, if you really want to make something that makes sense, it takes time	ln2
	Process	65	Creating the right conditions is time consuming	it just takes a lot of time to create the right conditions before you start doing things.	ln2
	Process	47	Constant reinvention of relationsip with context	And you constantly reinvent your understanding in this relationship between you as a designer, in this case a mechanical engineer, and what's possible within that realm of nature.	ln2
	Process	66	Org has to be prepared to have leverage within org.	if I'm gonna do it now myself, there will not be any kind of leverage within the organization. So at first I also have to prepare the organization	In2

		They make organnizations	we make organizations understand, with what kind of	
Process	56	understand society	society they have to create a relationship with	ln2
		A double a factor of	So how do we as an organization adapt to changes in relation to the organizations we work together with, but	
	-4	Adapting to society not	[] Those organizations are really traditional, so we	
Process	51	organizations	adapt to a changing society	ln2
Process	44	Iterations are key	But one big remark always is it's so dependent on iterations.	ln1
Process	95	"Every assignment has its own pattern"	I think that every assignment has its own pattern. So every societal challenge is related to its own pattern or you can say its own framework [] . And every time you have to explore what it is, you have to find out what it is.	In2
Process	96	Repeating patterns/frameworks is impossible	You can't use the same kind of patterns, frameworks from different contextual assignments. It's just impossible.	ln2
Process	97	Pattern make things insightful	it's how to find that pattern that is the expression that makes things most insightful. And when am I being most insightful with the most diversity with the least complexity?	In2
Process		Work needs a theoretical background	at the end of the 90s, I guess it was, where we became aware that what we're offering needs a, let's say, theoretical background or or let's say a model that you work with.	In5
Process	210	Before it was on the basis of experience	Because before that it was mainly I recall it shooting from the hip. You know, you advise clients on the basis of experience without even knowing exactly what it is that you were offering.	In5

	Process	212	Making knowledge explicit	But what we started doing then is start basically for ourselves, trying to make that knowledge that we had explicit.	In5
	Process	213	Explicit knowledge makes things sellable	So the fact that we had to make things explicit actually helped us in making things sellable.	In5
	Process	113	Starting point of novels	I give an example just by writers who write novels. Because writers write novels, they don't start from a problem. They just write a novel. And then people read it. And those people, they say "that book of that writer. God, did you read that book? It's just mind blowing". And that's exactly, I think, what design is all about. So you do something that was not expected. And was not the solution for any problem. Whatsoever. It's just there and it makes sense. And maybe it could be a solution for a problem, but it shouldn't start from that idea.	
Collaborative approach	Process	19	division of labour between client and studio	in a lot of cases we do the exterior and the user experience of a product and the interior is [] usually the intellectual property of the company that we work for.	In1
	Process	189	Co-create the strategy	they just haven't got the time or headspace to do it even if they could do it, but often they also know that they need that external perspective and use us as a sounding board. But then co-create the strategy with them. So they'll still have that ownership of it.	ln4
	Process	37	"Strategic questions always arise"	the strategic questions always arise and we always discuss them also during all the industrial design projects	In1

Process 59	Organizations might not understand at first	You have to dive into it and you have to accept that in creating outcomes there's a big chance that the organization you do it together with at first they don't understand shit of what you brought to the table.	In2
Process 10°	It starts with the definition of design	it starts with the definition of design. Then it starts with the definitions of the concepts that live within design	ln2
Process 108	Only then can the other things follow	And then maybe you can find out: OK, how can we start organizing this whole process and what does the strategy mean? And who is responsible? Where are responsibilities? What is responsibility?	In2
Process 110	"people long for a grip of the future"	if it's about strategy making, it is about the understanding that people long for a grip of the future. So it's very philosophical.	In2
Process 13	Design process as selling point	In general that's of course one of the reasons that designers are more and more used for this, for a variety of challenges that you Especially in Delft, you'll learn a problem solving process that you can apply to various things, so that definitely helps.	In3
Process 130	Scenario assessment	I think also in scenarios not like linear but you can assess different potential scenarios, how something can work and visualize them. Which is the difference, or a distinguishable or a unique selling point.	In3
Process 13	"Strategic projects are different in nature"	The strategic projects are a bit different in nature, so they don't so you do maybe one divergent convergence exercise and validate them with different knowledge than in a regular design project.	In3

Process 2	237	"Co-evolution of problem and solution space"	Kees [Dorst] triggered me many years ago, and it's a sentence that I use very often, something that he calls the "Co-evolution of problem and solution space". And I think for me that's the core of design. Basically stepping back from that old paradigm, where we say: first you have to analyze until [you reach] very thorough analysis, and then you start developing the solution. That doesn't work.	In5
Process 2	238	Linear approach in strategic design	I think also in strategic challenges it doesn't make sense to analyze something to death and only then start working on a solution.	In5
Process 2	239	Difference between SD consultants and strategic consultants	I think that's for me also the big difference between what strategic design consultants do and what strategic consultants do.	In5
Process 2	240	No designing without analyzing and vice versa	very often doesn't lead to a satisfactory solution simply because you cannot analyze without design and design without analyzing it. It's, you know, it's a loop.	In5
Process 2	245	Creating co-ownership	[Design Thinking] is good for actually creating co-ownership within companies, you know, having people involved in developing new ideas and new solutions, that you create ownership somehow within the company by having these people involved. But it doesn't mean that they can actually build the solution or develop a solution.	In5
Process 2	246	Preparing people within the org.	Preparing people within the company to accept your new direction, your new solutions, if they're involved.	In5
		Beneifits of co-ownership	if they feel responsible for the result, then it's much more likely that they will accept it and help implement it.	In5

	Process	248	Involvement in strategy benefits execution	the more you have people involved in strategic challenges, the more aware they are in the practical implementation of design solutions	In5
	Process	283	The product and result are leading	Be critical because clients are complaining. I mean, you're becoming humble in that sense, like it has to work. It has to be perfect. It's not you that has the perfect idea. The product is leading and the result is leading.	In6
	Process	285	Compromising and balancing requirements?	we were sometimes mad because they made it too thick or too "something". And now we learn like, yeah, it has to be sometimes a little bit less nice because otherwise it doesn't work.	In6
Strategic Projects develop out of previous industrial design projects	Project Type Development	4	Clients rarely request strategic projects from the start	it's not usual that they come to us and they ask us to do strategic development	In1
	Project Type Development	6	Strategic work develoops out of projects	And then we just think along with them and then their process starts and then "let's do a workshop about it" and then it, yeah, it becomes bigger and bigger.	In1
	Project Type Development	11	Slight increase in strategic projects over time	"And would you say that increased overtime that more and more clients ask you also for these types of services?" "Yeah, I think so, yeah."	ln1
	Project Type Development	12	Strategic projects develop out of previous ID projects	we already do like the whole project and products for them. And then yeah, we just think along with them, that's basically it. And it evolves towards strategic [design] as well.	In1
	Project Type Development	233	SD to ID happens rarely	to enter at the strategic level and then continue into the more operational level. That's a difficult one. I think that has to do with our reputation.	In5

Strategic projects develop out of existing relationships	Relationship Development	5	Strategic projects develop out of existing relationships	It's usually something that developed during a project or once we get to know them	In1
	Relationship Development	232	Relationship starts with ID, can grow into SD	So usually the relationship starts with a concrete product development. And then once they discover, once the clients discover that there's more knowledge that they can tap into, then usually it extends to a more strategic consultancy. Not always, but in some cases.	In5
Designers are given more responsibility while they try to figure out what their role is now	Role Change	7	It transitions into a advisory role	And then in the end, we're discussing and we're basically advising on what we would do and we are trying to organize for them to get all their thoughts straight, you know and that they can make wise decisions.	In1
	Role Change	8	high-level strategy advise after long relationships	we do have some clients that we have worked with for like 10 years or longer and they ask us, like, "OK, if it was your company, what's next, what should what would you do?".	In1
	Role Change	75	Designers create here the consistency	for the upcoming 10 years we are active in this field. And we as designers create the consistency.	ln2
	Role Change	76	Normally the org is responsible for consistency	from the other perspective, you're a consultant, you bring a strategy to people, you run out, and then the organization is responsible for the consistency over time.	In2
	Role Change	138	Role of the founder	that's also a bit my role as one of the founders that I'm less involved in the details of a project, but that I do look at like what are we doing here	In3

Role Change 200	the strategic role of designers changed	But what also has changed overtime I think is — I think that's probably also your interest — the strategic role that designers play in that process.	In5
Role Change 201	designers are involved in many stages of the process	nowadays we've seen that design has changed roles, the position of design has changed and that designers are actually involved in many stages in the process.	In5
Role Change 204	Societal changes change designers' role	So we see that from societal changes you end up with a new role for the design to play, simply because it's not a defined problem that you start working on, you start from changes in the environment that you have to deal, with without naming from the start what the solution will be or what kind of solution you will end up with.	In5
Role Change 234	Influence of the image of a designer	I think that's an image problem. Simply because if people think there's a cliche of a designer, what a designer is and what a designer does and the cliche is that it's like an artistic type of person, you know, working on his own, developing his own, his or her own ideas.	In5
Role Change 236	Profiles of designers are changing and more accepted	that's something that I think that's overtime changing since the profile of designers is changing over the years, more and more people get used to the fact that there's multiple types of designers and some of them are more strategic. And now that notion is developing. Uh, I think it gets more accepted.	In5
	Design trade in itself hasn't changed much	I think in that sense the whole development, most of the development on strategy and design has been about being able to communicate about things and name things make them explicit. The trade in itself, the design trade hasn't changed that much.	In5

	Role Change	268	Successful designers where always strategic	So in a sense, what the most successful designers in the past have been doing was already strategic design or design strategy, except that they didn't name it that way.	In5
	Role Change	273	Inventing a client	we invented a client, so we invented the company that was going to produce the product we designed and the studio is still there and it facilitates the company that's producing. Being us too. So it's kind of like having a lot of hats.	
	Role Change	280	Realistic in expectations	So we're more realistic in expectation and we have more insight into what's logical to change with respect to the design and what is not really bringing a lot.	In6
The concept of solutions is being questioned	Solutions	103	A solution implies a perfect solution	the world allows for a multiple array of meaningful interventions. So a solution implies that it is the perfect solution for the problem we have defined. And that's not what design is all about.	In2
	Solutions	104	"Design is giving society possibilities"	Design is giving society possibilities to use. And there is an array of multiple possibilities.	ln2
	Solutions	255	The outcome is never the end goal	designers should be aware of their role in that process, that there's never an end goal. Also in my business here the artifact, the product, is never the end goal. It's a means to an end. Uh, and in best cases you solve most of the challenges, but you usually don't because you create new ones.	In5
	Solutions		It is never "it"	we learn now and in the company that it's actually very hard to come there where you can say "this is it". [laughs] It's never "it", but there comes a point that you have to make it finish because there's no time because	In6

				you have to make decisions and you know it's never going to be 100% good.	
Research, reframing and visualizing	Strategic Work Types	9	research as strategic work	And then we do a little bit more research and we also go into depth where we do market research and look at all the competitors and try to find new ways to beat the competition	In1
	Strategic Work Types	15	They are involved in the fuzzy front end	So at the moment in which this project is kind of getting in shape and you're trying to define the scope of the project	In1
	Strategic Work Types	16	"Success Factors" as KPIs	we always try to define the 'Success Factors' as well. () we're trying to know what we need to do to make a good product and a good project for the customer.	In1
	Strategic Work Types	26	Strrategic work as Research plus Visualization	a few years ago, we did strategic research which was just strategic research. So not so much about the product design. Our added value there was that we can really make quick visualizations of ideas	In1
	Strategic Work Types	27	Brainstorming and visualization workshops	we basically organized for that company brainstorms and then they came up with a lot of ideas and we could just sketch on site their ideas and they could say "yes, I want this" or "no, I want that or that"	In1
	Strategic Work Types	38	Reframing as part of ID, not	we try to discuss if we should change the design brief towards that direction. You could say that that's strategy as well. But I also think it's just in industrial design engineering that's just part of it	In1
	Strategic Work Types	42	Questioning things is strategy	If you're always looking to make something better, no matter what it is, then you already think about strategy.	ln1
	Strategic Work Types	126	Convincing clients to reframe	to be honest that that is indeed a lot of times the model that you have to convince them to challenge certain starting points	In3

Strategic Work Types	127	Wide exploration	So also in our strategy, in the concept phase, we explored quite wide what that unit could be	In3
Strategic Work Types	128	Challenging requirements	that was also a bit Again, our own initiative, like the team really wanted to develop this two-wheeler. Whereas we were really challenging like what the requirements for it should be.	In3
Strategic Work Types	130	Research to challenge the design brief	we also introduced a phase to challenge the design brief to think about: OK, which vehicle category should it really be, that we interviewed various development companies to also get a better feel about the required budget to really bring it to the market. We do benchmark research to visit competitive companies to also get a better understanding of the size and the scope of the project.	In3
Strategic Work Types		Early in research and strategy	they were some of the first people to do kind of research and strategy and design in industrial design. So he was working with psychologists and early ethnography and stuff like that. So I found that very interesting.	In4
Strategic Work Types	147	Not really linked to design	it tends to be very research based, very foresight based and not terribly linked with design.	In4
Strategic Work Types		Strategy making is often wrongfully painted as fun	So if you defend society, you often create a relationship with the organizations you work together with that is uncomfortable in principle, and I think a lot of strategic design is based on the idea of bringing comfort. Of being understood, of simplifying, of fun. And there's a lot of tools that bring fun in creating a strategy. I hate that because I think society in the end is the victim of it.	In2

	Strategic Work Types	148	Three types of work	And it tends to focus around three types of work. It was ethnography work, it was trends work and it was kind of market analysis. You know, product mapping and all that kind of stuff.	
	Strategic Work Types		"strategic design is not plug and play"	strategic design is not about plug and play. You constantly have to reinvent everything to make something that is of value for another	ln2
Portfolio strategy	Strategic Work Types	18	Strategy as portfolio and R&D definition	[strategy is] portfolio strategy and [] what kind of R&D do you need?	ln1
	Strategic Work Types	179	Portfolio planning	Related to that we'll also get involved in planning new portfolios or lines of portfolios, for example.	In4
	Strategic Work Types	180	Design Language	So we'll do that, we call it experience strategy, other people call it design language or design identity strategy. So we typically do some analysis, come up with a vision and some principles, often you know Co-created with their design team.	In4
	Strategic Work Types	202	At first portfolio strategy	I remember that when I was first seriously, significantly involved in the strategic aspect was in the early 00s. So let's say 20 years ago. With clients that were thinking about how to restructure their portfolio.	In5
Engaging with the context	Strategic Work Types	62	SD is preparing the ground for different attitude	strategic design is not only making something, making a strategic proposal, but it's also making people understand that in order to create the strategy you need to have a completely different attitude than the kind of solving today's problems.	In2
	Strategic Work Types	83	Human/Society-centered design briefs	I think a real design brief should deal with "this is what we want to accomplish with people". "This is how we see society working" or "this is how we see society not working".	In2

	Strategic Work Types	84	Strategies should be on the goal level, not means level	I think strategies are often defined on the completely wrong level of abstraction. They're often at the means level and not at the goal level.	In2
	Strategic Work Types	85	getting a grip on the world through theories	it's a never ending evolution of "how can we get a grip on the world through the theories we develop?" And how can we make as few mistakes as possible?	In2
	Strategic Work Types	94	Strategy is finding patterns in the world	I think the key to it is: creating a strategy is not simplifying the world, but it is trying to find patterns in the world. And a pattern is different than simplifying because a pattern also allows that there's layers under.	In2
	Strategic Work Types	157	Strategy work vs actual strategy work	So when I was a director at Seymour Powell, but it was very much a they liked the intellectual glow of strategy. But they weren't strategic at all. Well, that's not true. They weren't particularly strategic and they're very much an executional design consultancy	In4
Collaboration and support	Strategic Work Types	173	Work with internal teams	sometimes we'll be doing some work with a design team to develop a new vision or strategy for the team itself.	In4
	Strategic Work Types	174	Work with leadership	then there's various things about, well, we'll work with the design director and their leadership team to develop a sort of internal strategy for that team and figure out how they're going to execute on that, what capabilities they're missing, things like that.	In4
	Strategic Work Types	175	Work at the front end of a project	We also do work right at the beginning of a strategic project.	ln4
	Strategic Work Types		Work when clients are stuck	they want to cut their carbon footprint by 25%. And that means they've got to radically change a particular product. They can't.	In4

Strategic Work Types	Unpack the problem and provide some directions	And it's a really high risk, important strategic project and they asked us to help them frame the problem, unpack the different dimensions and tensions within the problem because it's highly constrained problem and then come up with a vision or what they call the manifesto for it and some starter ideas to kick off the ideation.	In4
Strategic Work Types	Providing a guiding North star	the most important part of it is a kind of very ambitious kind of vision statement that is both facing the design and innovation team that gives them a bit of a North star to guide their ideation work, but also it's to communicate to the senior executives what this project's about.	In4
Strategic Work	Strategy is alignment	if I have to spend one or two or three weeks of work on that topic, it pays back in the end. So I don't I don't charge for strategy. Strategy for me is alignment with the client and that alignment pays back later on.	In5
Strategic Work	Quick projects to make the route	So we were always put in for a quick project to make the route: This is where we're going to and always in cooperation with R&D, within the frame they wanted to have it	In6
Strategic Work	Accompanying a project	It's like being a train beside another train and sometimes stepping in and something. Yeah, that's what a small team can do. And that's quite a lot.	In6
Strategic Work Types	Pitching to leadership	Or we were used by someone internal that had an idea that they couldn't get through the management.	In6

			I happen to know one strategic consultancy, they're kind of designers but they're more management consultants who focus on startups. But it's very much	
			around, you know, running workshops with them about how to position, how to organize for the next funding	
			round, all that kind of stuff. And it's very, you know,	
Strategic Work		Productization of strategy	they've almost productized their offer because they	
Types	193	consulting	cycle through so many startups	In4

# Appendix F - Website Data

This is an overview of the text data collected from a selection of websites. The text was analyzed for keywords and word clouds were created:

# LAYER

Keywords:

concepts, brand, approach, experiences, vision, engineering, products, branding, strategies, partners

Word cloud:



## Form Us With Love

## Keywords:

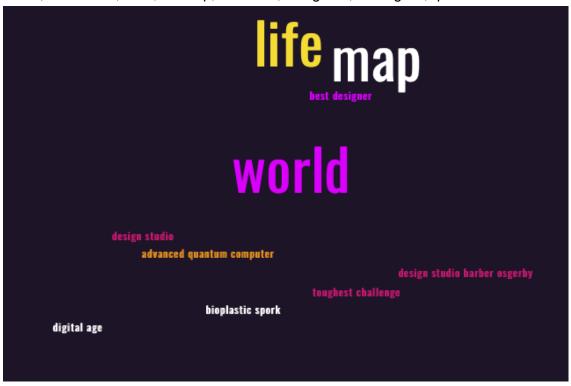
solutions, needs, watches, ventures, aim, studio, planet, solution, products, sustainability



# Map Project Office

# Keywords:

studio, innovators, lives, start-up, solutions, designers, strategists, quantum



# Space10

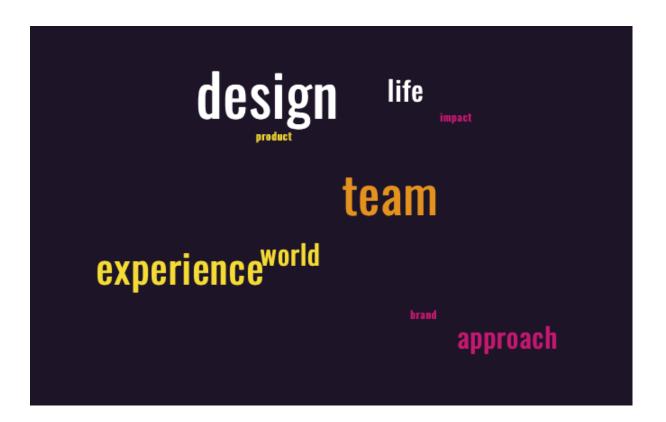
# Keywords:

solutions, planet, societies, imagination, shifts, lab, opportunities, insights, ikea, perspectives



# Fuseproject

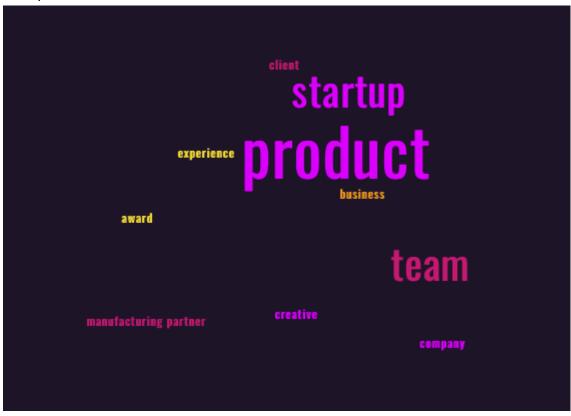
experience, product, approach, experiences, brands, lives, backgrounds, startups, products, impact



# Morrama

## Keywords:

manufacturing, startups, product, sustainability, expertise, clients, experience, principles, startup, brands



# Pearson Lloyd

Keywords:

clients, products, challenges, spaces, furniture, brands



## +Halle

# Keywords:

briefing, architects, collections, dwelling, productivity, designers, behaviors, purpose, sharing

