

Appendices of Master Thesis

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Appendix A: Online Survey Questions

1. What kind of shared mobility service do you often use?
shared bicycle
shared car
ridehailing
public transportation
None
other
2. Would you give up owning a car if shared mobility meets your travel needs?
○ Yes
O No
O I don't know
3. If not, what are the main reasons you don't want to give up owning a car?
Detailed text

4. Do you want to share your own car, bike, etc. with people who live in the same community with you (you will get a certain reward for it)?

	1	2	3	4	5	6	7	
Not willing at all	0	\bigcirc	\bigcirc	0	0	0	0	Very willing

5. Under what circumstances would you like to share your car with people in your community?

When I have a bigger/new car, I'm willing to share the old car.

When I rarely use my current car.

- When I can get financial incentive.
- When I can use other people's cars in return.
- When I can get other forms of rewards (e.g. free parking).
- None
- other...

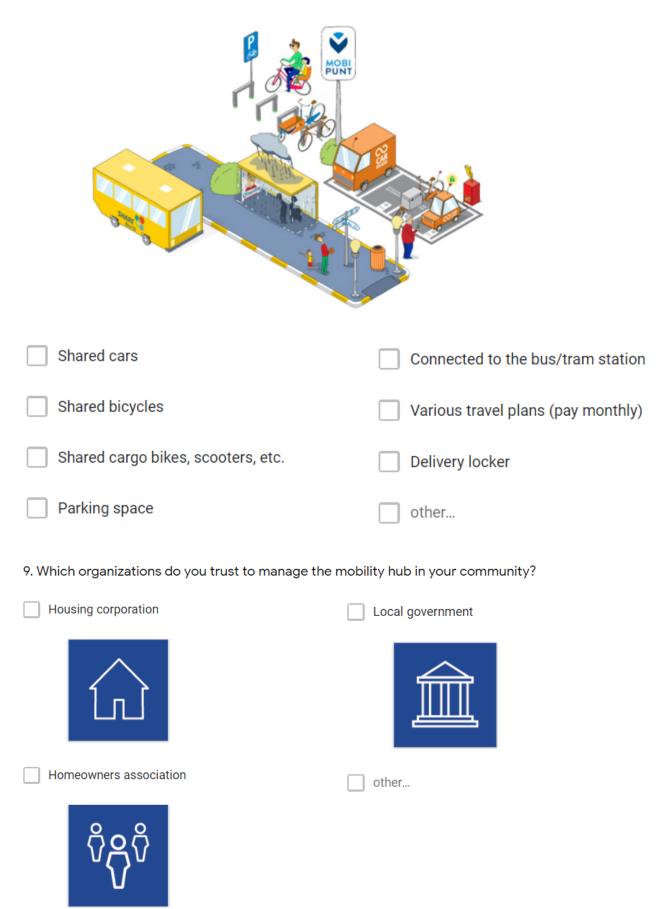
6. What types of vehicles would you like to share with people who live in the same community with you?

Car	Cargo bike	None
		other
Bicycle	Scooter	
A D		

7. Would you like to sell the car, bike, etc. you no longer use or rarely use to your community, for people live in your community to use it?



8. A mobility hub is a place where different travel options come together, such as car sharing, bike sharing, bus station, etc. It can also have other facilities that benefit the neighborhood. If a mobility hub is offered in your community, what service do you expect it to offer?



10. In addition to mobility services, do you share any of the following options with others in your apartment / community?

Kitchen	Public lounge
Bathroom	Public working place
Laundry room	None
Household tools(e.g. repair tools, cleaning tools)	other

11. The idea of Living as a Service is rapidly developing. It means that residents can subscribe to living services such as house cleaning, gym, laundry, etc. It also encourages tenants to share common spaces (e.g. kitchens, lounges, games room) whilst having their own private rooms. If you live in a community that offers shared living services, what factors will make you share space/facilities with others?



- I can enjoy more space and facilities with affordable rent.
- I can save money on household items(e.g.washing machine, cooking utensils).
 - I can have more opportunities to interact with other people.
- I will have less loneliness.
- It is more sustainable and avoid waste of resources.
- None
- other...

12. Only a few questions left! Which of the following best describes your living situation? *



- I own a house or apartment
- I live in other people's house or apartment

O other:

- 13. And who are you living with?
- I am living alone.
- I am living with roomates.
- I am living with my family.
- I am living with friends.
- O other:

14. Which country do you live in now?

Your answer

15. And what is your age?

Your answer

16. Finally, would you like to leave your email address? We'll use this to get in touch with you for further questions.

Your answer

Appendix B: Interview guide

Part 1:

- 1. What is your current living situation?
 - Are you living in city center or suburb?
 - Who are you living with?
- 2. What facilities/space are you sharing with people in your apartment?
 - What is you feeling of sharing these facilities/space with others? Why?
 - What benefits do you get from sharing these facilities/space with others? Why?
 - And any disadvantages?
- 3. Do you use shared living services? Why?
- What are your motivations to use shared living services? Why?
- What are your concerns or barriers when using shared living services? Why?
- 4. Do you feel that you are living in a community? Why?
- What kind of connection do you have with people in your community?
- What connection do you want to build with them? Why?

Part 2:

- 5. What traveling modes do you often use?
- What shared mobility services are you using? Why?
- 6. Would you give up owning a car if shared mobility meets your travel needs? Why?
- What are the main reasons you don't want to give up owning a car? Why?
- 7. Do you want to share your own car, bike, etc. with people who live in the same community with you (you will get a certain reward for it)?
 - Why?
 - Would you like to sell the car, bike, etc. you no longer use or rarely use to your community, for people living in your community to use it?
- 8. Under what circumstances would you like to share your car with people in your community?

- 9. What types of vehicles would you like to share with people who live in the same community with you? Why?
 - Under what circumstances would you use these vehicles?

Part 3:

- 10. If a mobility hub is offered in your community, what services do you expect it to offer?
 - Why do you want these services?
 - Under what circumstances would you use these services?
 - Among the services you mentioned above, which do you think are the most needed services? Why?
 - Which are the optional services? Why?
- 11. Which organizations do you trust to manage the mobility hub in your community? Why?
 - Compared with other organizations, what are the advantages of the organization you trust?

Appendix C: Codes and categories of interview results

Participation in shared services				
My shared space and facilities	Shared space and facilities			
Motivations to use shared services	Motivation: Enjoy more space with affordable expense			
Motivation: Save money				
Motivation: Interaction with other people				
Motivation: Sustainability				
	Motivation: No need to worry about repairs			
Concerns of using shared services	Concern: Availability is not ensured			
	Concern: Damage of shared products			
	Concern: Other people's bad behavior			
	Concern: Hygiene issue			
	Concern: Have to keep the shared place clean			
Concern: Have to ask other people's permission				

Share my own vehicles with others				
Motivations to share my own vehicles	hare my Motivation: When I rarely use it			
Motivation: Get money from sharing it				
Motivation: Free parking				
Motivation: Other forms of rewards				
Barriers to share my own vehicles	Have concerns about sharing my own vehicles			
Want to have control of my car				
	Want to share with people I know			
Sell instead of sharing idle vehicles	Benefit of selling: get rid of the responsibility			
Prefer to sell the idle vehicles instead of sharing them				

What car ownership means to me				
Benefits of owning a car	Owning a car gives me a sense of safety.			
	Owning a car gives me freedom.			
	Owning a car makes my life more convenient.			
	Choosing the brand of the car is important to me.			
Factors determining whether to own a car	I will give up owning a car if I don't use it often.			
	If I have a family and children, I will buy a car.			
	If economic situation permits, I will buy a car.			
	High parking fee, hard to find parking space			

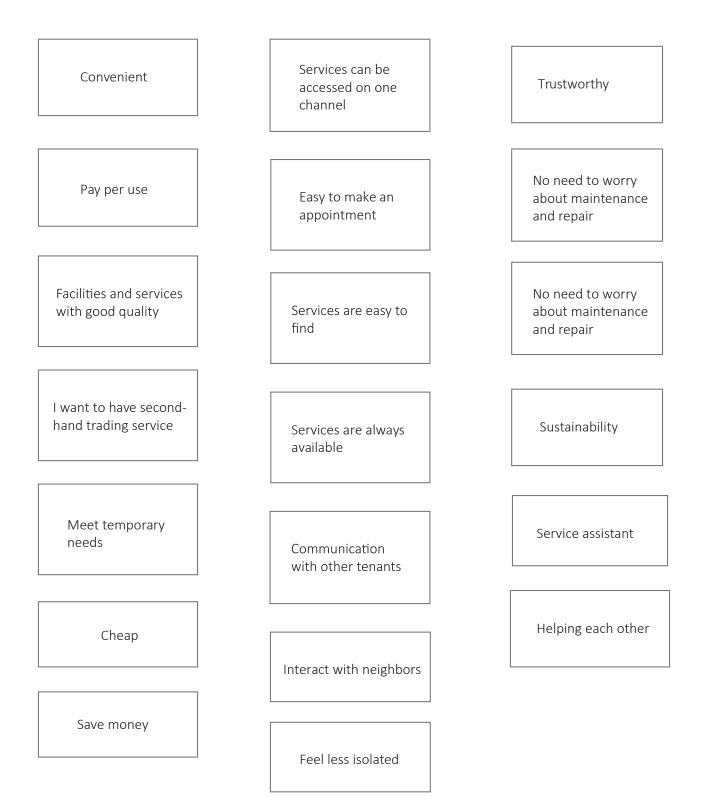
Community life				
Neighborhood relation- ship	I say hi to my neighbors, but we don't keep in touch.			
	Neighbors are not equal to friends			
	Roommates are like friends.			
	Not active to social interaction			
Trust people in the community				
	Happy with the current neighborhood relationship			
	Want to improve neighborhood relationship			
Factors of having a sense of community	Shared facilities and space in the community			
	People know each other			
	Have community days			
	Have an organization that manages the community			
	Similar identities of residents			

Expectations for shared living and mobility services				
Expected services Expected shared vehicles				
Expected mobility related facilities/services				
Expected non-mobility related facilities				
No need to use shared mobility				
Management organiza- tion of the services	Trusted organization			
Organizations not suitable for managing the services				

Living situation			
Living environmentL	iving environment		
Travelling modes	My current travelling modes		
	Travelling modes in my city		

Appendix D: Results of collaborative sessions

An overview of participants' motivations and desires of using shared living services (including mobility)



An overview of participants' problems, frustrations and worries of using living services (including mobility)



DESIGN FOR OUT future



IDE Master Graduation

Project team, Procedural checks and personal Project brief

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

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

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

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

STUDENT DATA & MASTER PROGRAMME

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

family name		Your master program	nme (only sele	ct the options that	t apply to you):
initials	given name	IDE master(s):	() IPD)	Dfl	SPD
student number		2 nd non-IDE master:			
street & no.		individual programme:		(give da	te of approval)
zipcode & city		honours programme:			
country		specialisation / annotation:			
phone		_			
email					

SUPERVISORY TEAM **

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

** chair ** mentor		dept. / section:	Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v
2 nd mentor	organisation: city:	country:	Second mentor only applies in case the assignment is hosted by an external organisation.
comments (optional)		•	Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

Chair should request the IDE



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

chair	date			signature	
CHECK STUDY PROGRESS To be filled in by the SSC E&SA (Shared Service C The study progress will be checked for a 2nd time					f the project brief by the Chair.
Master electives no. of EC accumulated in total: Of which, taking the conditional requirements into account, can be part of the exam programme List of electives obtained before the third semester without approval of the BoE		•	C		st year master courses passed ng 1 st year master courses are:
name	. date		_	signature	J. J. de Bruin Bruin Bruin 16:00:11 10:0011 10:0011 10:0011

FORMAL APPROVAL GRADUATION PROJECT

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

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

Content:	APPROVED	NOT APPROVED
Procedure:	APPROVED	NOT APPROVED
(
		comments

name	date	signature	
IDE TU Delft - E&SA Department /	// Graduation project brief & study overvie	ew /// 2018-01 v30	Page 2 of 7
Initials & Name		_ Student number	
Title of Project			



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

INTRODUCTION **

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

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Initials & Name

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Title of Project



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Title of Project

Initials & Name _____ Student number _____



PROBLEM DEFINITION **

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

ASSIGNMENT **

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

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PLANNING AND APPROACH **

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

start date _____-

end date

- -

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Initials & Name

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Title of Project



MOTIVATION AND PERSONAL AMBITIONS

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

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

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Title of Project