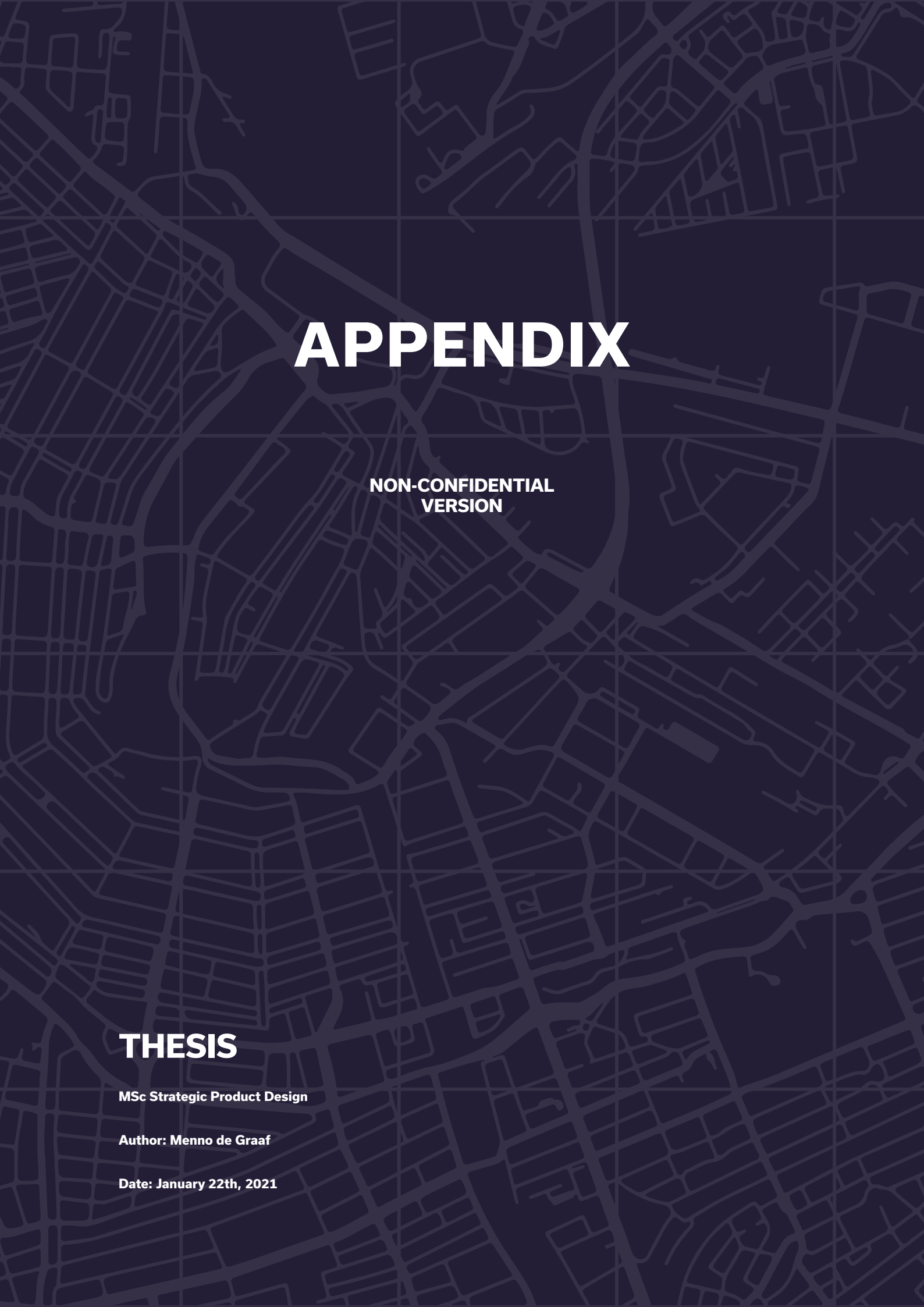


The background of the entire page is a dark blue-grey color with a light grey, stylized map of a city street grid. The grid is composed of numerous thin lines representing streets, with some thicker lines indicating major thoroughfares. The map is oriented with a grid of squares, typical of urban planning.

APPENDIX

**NON-CONFIDENTIAL
VERSION**

THESIS

MSc Strategic Product Design

Author: Menno de Graaf

Date: January 22th, 2021

A. | Entry modes

Description of entry modes

Within the literature, entry modes are categorised as non-equity based, such as export and contractual agreements, and equity-based, such as joint ventures and wholly-owned subsidiaries (Pan & David, 2000; Root, 1994).

Within a licensing agreement, a company transfers the right to use its industrial and intellectual property (e.g. its technology) for a set period of time in return for royalties or fees (Bradley, 2004; Root, 1994). Licensing provides a method for making profits in a foreign market through low initial investment and with a low commitment of resources. It can provide, at a low cost, information on product performance and competitor activities (Bradley, 2004). However, income from licensing can be lower than when operating in equity-based modes, a lack of control over licensee operations can result in damage to the licensor's reputation and brand (Erramilli & Rao, 1990) and it often discloses accumulated competitive knowledge and experience resulting in possible future competitors (Bradley, 2004).

Other contractual entry modes that are relevant within the context of this research are service contracts and management contracts. Both involve the transfer of services directly to foreign entities in return for monetary compensation, similar to licensing. International firms commonly combine contractual entry modes with export or equity modes (Root, 1994). Alternatively, an international firm can participate in a strategic alliance. A strategic alliance is a long-term partnership between two or more companies with the aim of building competitive market advantages for all participating firms (Nickels et al., 2010). Unlike joint ventures, costs, risks, governance, management and profits are not shared between participants.

Equity modes, also called investment entry modes, break down into equity joint ventures (minority equity joint venture, 50% share equity joint venture, and majority equity joint venture) and wholly-owned subsidiary (e.g. greenfield, acquisition, and others) (Pan & David, 2000; Root, 1994).

Equity joint ventures are the result of the formation of two or more parties into a third to carry out economic activity (Bradley, 2004). These parties share in profits and losses as well as control of the operations and governance. Joint ventures facilitate technology transfer, provide access to resources and markets, help in reducing political risk and can the competitive position of each of the firms (Bradley, 2004). Possible difficulties regarding joint ventures include loss of control over foreign operations, increasing cost of control, failure in coordination and loss of flexibility and confidentiality (Bradley, 2004).

Equity joint ventures are classified as three general types, being minority equity joint venture, 50% share equity joint venture and majority equity joint venture (Pan & David, 2000). The difference between each mode is the percentage of shares owned by the internationalizing company, e.g. 30% shareholder within a minority joint venture and 60% shareholder within a majority joint venture.

A wholly-owned subsidiary, the second category of equity modes, refers to a company whose common stock is 100% owned by a parent company, in this case, the internationalizing company. This type of equity mode allows the parent company to manage and diversify while possibly reducing risk. Wholly-owned subsidiaries normally retain legal control over operations, products and processes (Kenton, 2020). The two main routes for establishing wholly-owned subsidiaries are greenfield investments, which involve the establishment of new facilities in foreign markets, and acquisitions, which involve acquiring existing local firms or facilities (Hennart & Park, 1993). The determinants of choice for firms when comparing greenfield and acquisition have been thoroughly described by (Slangen & Hennart, 2007).

C. | Culture

Setup

The author set up an online questionnaire containing 16 closed rating questions, as well three background questions (name, role and amount of time working at Plotwise). He set up these questions following the work of Groysberg et al. (2018). [Figure A1](#) shows the questionnaire as provided to the participants via Google Forms.

Section 1 of 2

Plotwise Culture - October 2020

"Culture eats strategy for breakfast" - Peter Drucker

Dear colleagues,

As part of my graduation research (read more below), I would like to get an objective overview of Plotwise's company culture. A strategy that's aligned with culture often results in positive outcomes for the entire organization.

Filling in this survey will take about 5 minutes and would greatly help my research. Grab a cup of coffee, make yourself comfortable and let me know what you think: there are no wrong answers. Most questions are rating questions.

I will anonymize your data and results will be used for my own research purposes. Please be aware that this survey differs from the one that measures the E-NPS since it does not measure your satisfaction with the company or personal performance, but your 'feeling' and 'engagement' with Plotwise.

Any questions/comments? Contact me via Slack!

Thanks a lot,

Menno

////// READ MORE //////////

My research topic:

To conclude my MSc Strategic Product Design at the Delft University of Technology, I'm performing research and writing a thesis on a new international growth and go-to-market strategy for Plotwise. I expect that company culture will strongly influence the way the Plotwise will address and serve new international customers. Moreover, culture is an important determinant when designing a strategy. Therefore I'm curious to learn more about the current culture. Your input is very valuable!

To conclude my MSc Strategic Product Design at the Delft University of Technology, I'm performing research and writing a thesis on a new international growth and go-to-market strategy for Plotwise. I expect that company culture will strongly influence the way the Plotwise will address and serve new international customers. Moreover, culture is an important determinant when designing a strategy. Therefore I'm curious to learn more about the current culture. Your input is very valuable!

My name is... *

Short answer text

My role is... *

Short answer text

I've worked at Plotwise for.. *

☐ Less than 6 months

☐ Between 6 and 12 months

☐ Between 12 and 24 months

☐ More than 24 months

After section 1 Continue to next section

Figure A1. Culture survey in Google Forms.

Section 2 of 2

Survey

On a scale of 1-5, please rate how well each of the below statements describes Plotwise as an organization.

1 = NOT AT ALL WELL
2 = NOT VERY WELL
3 = SOMEWHAT WELL
4 = VERY WELL
5 = EXTREMELY WELL

As an organization, Plotwise is focused on collaboration and mutual trust *

12345

Not at all well

Extremely well

Plotwise is focused on compassion and tolerance *

12345

Not at all well

Extremely well

Plotwise is focused on exploration and creativity *

12345

Not at all well

Extremely well

Plotwise is focused on fun and excitement *

12345

Not at all well

Extremely well

Plotwise is focused on achievement and winning *

12345

Not at all well

Extremely well

Plotwise is focused on strength and boldness *

12345

Not at all well

Extremely well

Plotwise is focused on planning and caution *

12345

Not at all well

Extremely well

Plotwise is focused on structure and stability *

12345

Not at all well

Extremely well

Plotwise feels like a big family *

12345

Not at all well

Extremely well

Plotwise feels like an idealistic community *

Idealistic means having a strong belief in perfect standards and trying to achieve them, even when this is not realistic.

12345

Not at all well

Extremely well

Plotwise feels like a dynamic project *

12345

Not at all well

Extremely well

Plotwise feels like a celebration *

12345

Not at all well

Extremely well

Plotwise feels like a meritocracy *

Meritocracy stands for a social system where people get power or money on the basis of their ability

12345

Not at all well

Extremely well

Plotwise feels like a competitive arena *

12345

Not at all well

Extremely well

Plotwise feels like a carefully planned operation *

12345

Not at all well

Extremely well

Plotwise feels like a smoothly running machine *

12345

Not at all well

Extremely well

Questions per domain

Each domain (caring, purpose, learning, enjoyment, results, authority, safety and order) contained two questions; they were distributed as follows:

Caring: question 1 and 9

Purpose: question 2 and 10

Learning: question 3 and 11

Enjoyment: question 4 and 12

Results: question 5 and 13

Authority: question 6 and 14

Safety: question 7 and 15

Order: question 8 and 16

Coordinate calculation

The author transformed the score of each participant per domain to an average score to plot on a graph. The X and Y coordinates of all responses were calculated through the following formulas:

$X (\text{respondent}) = \text{score ("caring" + "order")} - \text{score ("enjoyment" + "results")}$

$Y (\text{respondent}) = \text{score ("learning" + "purpose")} - \text{score ("authority" + "safety")}$

D. | Sales funnel & process

Data collection

To get a thorough understanding of the sales process, the author performed online workshops with all team members of the sales team. For this, he created a sales process canvas ([figure A2](#)) which he shared with the participants via Miro. He started by filling in data that was already available from internal documents and those that were discussed in weekly meetings. Moreover, he presented his canvas to the CEO, who argued to add the ninth and tenth row as shown in the figure. Within every online workshop, all with one participant at a time, the author and the participant went over the canvas and filled in the gaps. This resulted in [figure A3](#).



Figure A2. Empty sales process canvas.

F. | Country selection

Analysis setup

The country selection involved four steps of analysis: preliminary analysis, competitor analysis, country macro characteristics analysis and country micro characteristics analysis. The analysis included 31 countries located in Western Europe; the list comprised all EU-27 countries (Eurostat, 2020) as well as the United Kingdom, Norway, Switzerland, Iceland and Norway.

Four parameters informed the decision within the preliminary analysis. The first parameter indicated the penetration of internet usage within a country. This served as a clear indication of market size potential. The second parameter indicated to what extent consumers in a specific country are used to ordering goods online, which gave insight into the potential for growth in the number of online shoppers. The third parameter indicated to what extent consumers endure a pain that Plotwise's product can solve. Lastly, the fourth parameter described the actual size of the market Plotwise operates in.

CAGE model

Cultural distance refers to "the attributes of a society that are sustained mainly by interactions among people, rather than by the state" (Ghemawat, 2007). It is about values and attitudes. Strong cultural differences normally tend to reduce economic activities between two countries.

Administrative attributes include "laws, policies and institutions that typically emerge from a political process and are mandated or enforced by governments" (Ghemawat, 2007). The establishment of the European Union is a good example of an effort to reduce administrative distance between countries.

Geographic distance focuses on the physical distance between two countries, as well as other location-bound such as time zones and man-made attributes like transportation and communication structures. The latter category of attributes can also be placed under economic distance (Ghemawat, 2007).

Economic distance refers to "differences that affect cross-border economic activity through economic mechanisms distinct from the cultural, administrative or geographic ones already considered" (Ghemawat, 2007). Common economic attributes regard economy size as well as per capita incomes. Richer countries tend to engage in international trade more often than their poorer counterparts; most activity is with other rich countries.

[Table A1](#) shows the indicators as presented in the literature that the author reviewed. These indicators informed the selection of the CAGE indicators.

CAGE characteristics UK

In the United Kingdom, it is easier to conduct business (score of 8.4 compared to 7.6) and it has more than double the amount of new businesses per capita (16 registrations per 1000 adults compared to 6).

More people are living in the largest city (16% compared to 7%) and in urban agglomerations of more than 1 million (27% compared to 13%). This is assumed to have a positive effect on the demand for last mile delivery. The United Kingdom has a 20% lower GDP per capita (US\$ 42000 compared to US\$ 52000) but a much higher total GDP (US\$ 1.9 billion compared to US\$ 0.9 billion). The 10 year annual average GDP growth rate is higher (1.7% to 1.3%). The United Kingdom scores higher on companies embracing disruptive ideas (6.6 to 6.0).

More important, the volume of parcel deliveries is much higher (1.9 billion parcels compared to 0.3 billion). Britons seem to

From:	Initial screening
(Marchi et al., 2014)	e.g. Gross National Product
(Marchi et al., 2014)	e.g. Total number of parcel deliveries
	Secondary stage
	<u>Objective input variables</u>
(Marchi et al., 2014)	Apparent consumption (domestic production plus imports minus exports)
(Marchi et al., 2014)	Consumption trend (years X to Y)
(Marchi et al., 2014)	% of university students
(Marchi et al., 2014)	% of population in the 10-30 years age range
(Marchi et al., 2014)	Substitutive product demand (e.g. demand for high-tech products, per 10.000 of population)
(Marchi et al., 2014)	Country risk (e.g. ease of doing business, starting a business, dealing with licenses, hiring and firing, registering property, getting credit, protecting investors, paying taxes, trading across borders, closing a business)
(Marchi et al., 2014)	Human development index (HDI)
(Marchi et al., 2014)	GDP per capita
(Marchi et al., 2014)	Consumption propensity (apparent consumption/total consumption)
(Marchi et al., 2014)	Country of origin advantage (made in Italy import as % of total imports)
(Marchi et al., 2014)	Import penetration (total imports as % of total consumption)
(Marchi et al., 2014)	Tariff barriers
(Marchi et al., 2014)	Geographic distance (distance (km) between Italy and target country)
	<u>Perceptual input variables</u>
(Marchi et al., 2014)	Perceived level of product standardization
(Marchi et al., 2014)	Perception of psychic distance
(Marchi et al., 2014)	Perception of imitation risk
(Marchi et al., 2014)	Product superiority (perception of superiority that foreign consumer could potentially assign to firm's product)
(Marchi et al., 2014)	Market information from secondary data
(Marchi et al., 2014)	International experiential knowledge (institutional and business experiential knowledge on the target market)
(Marchi et al., 2014)	Embeddedness in a local network with foreign relationships
(Marchi et al., 2014)	Managerial skills (level of managerial skills in relation to the foreign market)
(Alouche & Schlenkerich, 2011)	<u>Opportunity/risk profiles (e.g. balanced 50/50, aggressive 70/30, risky 100/0)</u>
	Market opportunity or potential:
(Alouche & Schlenkerich, 2011)	weighted average of market size (population), purchasing power (per capita GDP) and real GDP growth
	Risk:
(Alouche & Schlenkerich, 2011)	weighted average of political, economic, legal and regulatory risks, and distance (cultural and geographic)
(Alouche & Schlenkerich, 2011)	<u>Macro indicators:</u>
(Alouche & Schlenkerich, 2011)	GDP
(Alouche & Schlenkerich, 2011)	Inflation rate
(Alouche & Schlenkerich, 2011)	Currency
(Alouche & Schlenkerich, 2011)	National language
(Alouche & Schlenkerich, 2011)	Use NPV as second step assessment
(Koch, 2001)	<u>Country identification</u>
(Koch, 2001)	Population, GNP, growth rates statistics
(Koch, 2001)	<u>Preliminary screening</u>
(Koch, 2001)	political stability, geographic distance, economic development
(Koch, 2001)	<u>In-depth screening</u>
(Koch, 2001)	industry and market-specific data, market potential, growth rates forecasted, strengths and weaknesses of competition, entry barriers, company resources constraints revisited
(Gaston-Breton & Martin Martin, 2011)	<u>Macro-segmentation (country-level)</u>
	<u>Market size/potential:</u>
	GDP
	Population
	Imports
	Energy consumption
	<u>Market development</u>
	GDP per capita
	total employment rate
	gross domestic expenditure on R&D
	level of internet access
	corruption perception index
(Gaston-Breton & Martin Martin, 2011)	<u>Micro-segmentation (consumer level) --> using values to cluster consumers and countries with cultural commonalities (general relationship between values and behaviour)</u>
	<u>Personal values</u>
	Religion
	Democracy
	<u>Social values</u>
	Obedience
	Hard work
	Determination, perseverance
	Thrift, economizing and avoiding waste
	Tolerance and respect for other people
	Sense of responsibility
	Independence
	Imagination
(Stremersch & Tellis, 2004)	Uncertainty avoidance
	Masculinity
	Protestantism

	Foregin direct investment, net
	Foreign direct investment, net inflows
	Exports of goods and services
	Import of goods and services
	Merchandise imports
	Commercial service imports
	Merchandise exports
	Commercial service exports
	Energy use (kt of oil equivalent)
	Population density
	Population ages 0-14 (as % of total)
	Age dependency ratio (%of working-age population)
	Population growth
	Population
	Urban population growth
	Urban population
	Roads, total network (km)
	Motor vehicles (per 1000 people)
	Internet users (per 100 people)
	Unemployment, total (% of total labor force)
	Market size: electricity consumption, urban population
	Market intensity: GNI per capita estimates using PPP, Private consumption as a percentage of GDP
Market potential index	Market growth rate: CAGR of primary enery use, CAGR of GDP
	Market consumption capacity: consumer expenditure, income share of middle-class, median disposable income per household
	Commercial infrastructure: airport connectivity, cellular mobile subscribers, fixed broadband subscriptions, fixed broadband internet speed, logistics performance index LPI, paved road density, population per retail outlet
	Market receptivity: per capita imports from US, trade as percentage of GDP
	Economic freedom: economic freedom index, political freedom index
	Country risk: business risk rating, country risk rating, political risk rating
	For sources, see website https://globaledge.msu.edu/comparator#fields-selection
	http://datatopics.worldbank.org/world-development-indicators/
	https://data.worldbank.org/indicator
	https://ec.europa.eu/eurostat/data/database

Table A1. Analysis indicators from literature.

have more altruism (0.03 compared to -0.19, as compared to standard deviation worldwide). The ratio iOS to Android users is higher (0.86 to 0.58); this could indicate a society that is open to innovation. Britons score higher on positive reciprocity (-0.04 to -0.15).

The United Kingdom has double the amount of green climate funds per capita (US\$ 18.77 to US\$ 7.94 ; the share from wind energy is also much higher (7.29% to 2.91%). The per capita energy consumption from solar however is over half that of The Netherlands (465 KWh compared to 752 KWh).

However, the country also has its disadvantages. Firstly, the country is not part of the European Union and uses another currency than The Netherlands. Less people live in cities (84% of people compared to 92%). Roads are much more congested in London (149 hours lost per person per year) than in Amsterdam (28 hours lost per person per year); average last mile speed is little over half of that of Amsterdam's as well (10 mph compared to 18 mph). Britons seem to have much less patience than the Dutch (0.54 compared to 0.95, as deviation from the world wide average). The productivity per hour worked is lower (US\$ 46.87 compared to US\$ 61.95). Companies seem less open to multi stakeholder collaboration (7.0 to 7.7), the growth of innovative companies is lower (7.0 to 7.6) and the competition in services is a bit worse (5.4 to 5.9). On average, young people spent one hour less on the internet per day (5 hours compared to 6 hours). People tend to trust their government slightly less (51% compared to 57%).

Lastly, there are also similarities between the two countries. The household net adjusted disposable income is similar to that of The Netherlands (US\$ 28715 to US\$ 29333). The buyer sophistication is roughly the same (6.7 to 6.9) as well as the attitude towards entrepreneurial risk (7.0 to 7.1). The logistics performance index is roughly the same (7.8 to 8.0); the same goes for the economic complexity index (1.53 to 1.3). The percentage of young people engaging in social networking online is the same for both countries (92%).

UK consumer preferences

On average, people in the UK order online more than two times a month. They are likely to pay for additional delivery services like same-day delivery. Just under 40% are willing to pay an extra fee for CO2 neutral delivery. Consumers are also willing to pay extra to reduce delivery time or when they can pick the exact time slot or day.

However, 61% percent of British consumers abandon a shopping cart if they perceive the displayed delivery cost as too high. Acceptable shipping costs are £5,20 for a £15 to £50 order; £6,60 is acceptable for a £150 order.

The other top two reasons for consumers to leave a webshop are too long expected delivery times and absence of preferred delivery mode.

British online shoppers choose for a specific carrier when they have endured a positive delivery experience in the past. Cheaper price and faster delivery are also important determinants.

Deloitte (2020) conducted a longitudinal study with customers across 15 countries to track consumer behaviour during the COVID-19 pandemic. According to this research, 51% of consumers are willing to pay more to improve the level of convenience; this is the largest group of consumers.

22% UK consumers intend to increase their expenses on groceries; this is the largest shopping category. 20% of these consumers intend to shop online and have it delivered at home, only 8% want to pick up the order.

The second biggest spending intention is on household goods (11%), of which 20% will be ordered online and home delivered, and only 7% online ordered and picked up in store. The category with the most online shoppers and home deliveries is electronics.

G. | Country selection results

Preliminary analysis, results of 33 countries

	1		2		3		4			Total
	% of individuals that purchased online in the last year	Rank	Speed of delivery longer than indicated (% indicated it as a problem)	Rank	Internet use % of total population in last 12 months	Rank	Online shoppers in the last year (thousands)	Rank	Rank points	Equally Weighted ranking 1,2,3,4
Netherlands	84,0	3	35	3	96	7	13977	6	19	2
Germany	84,0	3	10	23	94	10	65642	1	37	6
United Kingdom	91,0	1	32	5	96	7	58387	2	15	1
Belgium	72,0	15	23	10	91	11	7524	8	44	9
Norway	83,0	6	36	2	99	1	4394	14	23	4
Sweden	84,0	3	30	7	98	3	8467	7	20	3
Denmark	86,0	2	15	17	97	4	4038	16	39	7
Finland	77,0	9	25	9	95	9	286	30	57	15
Bulgaria	31,0	30	9	26	71	31	1535	21	108	31
Czech Republic	73,0	13	18	13	88	16	6854	10	52	12
Estonia	75,0	11	18	13	91	11	905	24	59	16
Ireland	73,0	13	20	12	91	11	3283	19	55	14
Greece	51,0	26	8	28	76	29	4154	15	98	29
Spain	64,0	21	5	30	91	11	905	24	86	22
France	77,0	9	28	8	91	11	27418	3	31	5
Croatia	57,0	24	17	16	80	26	1855	20	86	22
Italy	49,0	28	18	13	78	28	23046	4	73	19
Cyprus	45,0	29	11	22	86	19	464	27	97	28
Latvia	54,0	25	13	19	87	18	899	26	88	25
Lithuania	59,0	22	10	23	82	24	1348	22	91	27
Luxembourg	75,0	11	31	6	97	4	451	28	49	11
Hungary	58,0	22	13	19	83	23	4784	12	76	20
Malta	67,0	18	37	1	86	19	290	29	67	17
Austria	71,0	16	22	11	88	16	5546	11	54	13
Poland	66,0	19	12	21	82	24	20550	5	69	18
Portugal	51,0	26	4	31	76	29	3980	17	103	30
Romania	29,0	31	15	17	80	26	4491	13	87	24
Slovenia	66,0	19	9	26	84	22	1158	23	90	26
Slovak Republic	71,0	16	10	23	85	21	3292	18	78	21
Iceland	80,0	8	33	4	99	1	286	30	43	8
Switzerland	83,0	6	6	29	97	4	6904	9	48	10

Table A2. Results preliminary analysis, 33 countries.

Links to indicators, preliminary analysis

Indicator 1: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_ec_ibuy&lang=en

Indicator 2: https://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-053762_QID_-7BCA6191_UID_-3F171EB0&layout=TIME.C.X.0;GEO.L.Y.0;INDIC.IS.L.Z.0;IND_TYPE.L.Z.1;UNIT.L.Z.2;INDICATORS.C.Z.3;&zSelection=DS-053762IND_TYPE.IND_TOTAL;DS-053762INDIC_IS.I.BSPD;DS-053762UNIT.PC_IND_BLT12;DS-053762INDICATORS.OBS_FLAG;&rankName1=TIME_1_0_0_0&rankName2=UNIT_1_2_-1_2&rankName3=GEO_1_2_0_1&rankName4=INDICATORS_1_2_-1_2&rankName5=INDIC-IS_1_2_-1_2&rankName6=IND-TYPE_1_2_-1_2&sortC=ASC_-1_FIRST&rStp=&cStp=&rDCh=&cDCh=&rDM=true&cDM=true&footnes=false&empty=false&wai=false&time_mode=NONE&time_most_recent=false&lang=EN&cfo=%23%23%23%2C%23%23%23.%23%23%23%23

Indicator 3: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_ci_ifp_iu&lang=en

Indicator 4: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_ec_ibuy&lang=en

* Note: indicator 4 is a low estimation. Multiplying the number of inhabitants per country with indicator 1 results in a higher value.

CAGE model, country macro characteristics

		Unit	Netherlands (benchmark)	United Kingdom	Sweden
			Value	Difference	Value
Cultural	Per capita CO2 emissions for transport	Tonnes CO2 per capita	1.77	1.82	0.1
	Number of ATMs	ATMs per 100000 adults	45.01	129.49	84.5
	Ease of doing business index 2020	Score (1-10 best)	7.6	8.4	0.8
	Attitudes towards entrepreneurial risk	Score (1-10 best)	7.1	7.0	-0.1
	Growth of innovative companies	Score (1-10 best)	7.6	7.0	-0.6
	Companies embracing disruptive ideas	Score (1-10 best)	6.0	6.6	0.6
	Multi-stakeholder collaboration	Score (1-10 best)	7.7	7.0	-0.7
	Buyer sophistication	Score (1-10 best)	6.9	6.7	-0.2
	Ratio iOS to Android	Ratio (the higher the better)	0.58	0.86	0.3
	New business density	New registrations per 1000 people ages 15-64	6.07	15.74	9.7
	Green climate fund pledges per capita	US\$ per capita	7.94	18.77	10.8
	Productivity per hour worked	US\$ per hour	61.95	46.87	-15.1
	Per capita energy consumption from solar	KWh per capita	752	465	-287.0
	Share of primary energy from solar	Percentage	1.32	1.44	0.1
	Share of energy from wind	Percentage	2.91	7.29	4.4
	Percentage of young people engaging in social networking online	Percentage of young people aged 16-24	92.6	92.7	0.1
	Daily time spent on the internet by young people	Hours spent per day on the internet by people aged 16-24	6.03	5.15	-0.9
	Share of people that trust their national government, 2018 (Pluralism?)	Percentage of people	57.11	51.02	-6.1
	Estimates of altruism	Standard deviation from global distribution where 0 is the average	-0.19	0.03	0.2
	Estimates of positive reciprocity	Standard deviation from global distribution where 0 is the average	-0.15	-0.04	0.1
	Estimates of patience	Standard deviation from global distribution where 0 is the average	0.95	0.54	-0.4
Administrative	Country risk rating	Risk rating	A2	A4	A2
	Currency	Currency	EUR	GBP	SEK
	Political system	-		Yes	Yes
Geographic	Logistics performance index (LPI)	Score (1-10 best)	8.0	7.8	-0.2
	"Urban population as share of total population"	%	91.88	83.65	-8.2
	"Share of total population living in the largest city"	%	7.16	16.41	9.3
	"Share of total population living in urban agglomerations of more than 1 million"	%	12.4	27	14.6
	Distance between Delft and country's capital city	KM		314	1180
Economic	Competition in services	Score (1-10 best)	5.9	5.4	-0.5
	Gross Domestic Product (Current US\$)	Billion US\$	909.07	2,827.11	1918.0
	"GDP per capita (Current US\$)"	US\$	52447.83	42300.27	-10147.6
	"10-year average annual GDP growth %"	%	1.3	1.7	0.4
	"Household net adjusted disposable income"	US\$	29333	28715	-618.0
	"Total volume of parcel deliveries"	Thousands per year	349,800	1,923,000	1573200.0
	Economic Complexity Index (ECI)	Index	1.3	1.53	0.2

Norway	France		Denmark		Germany		Iceland		Finland		Belgium		
Value	Difference	Value	Difference	Value	Difference	Value	Difference	Value	Difference	Value	Difference	Value	Difference
2.53	0.8	1.89	0.1	2.07	0.3	1.96	0.2	2.71	0.9	2.26	0.5	2.29	0.52
39.05	-6.0	104.38	59.4	50.46	5.5	118.8	73.8	91.44	46.4	32.6	-12.4	88.23	43.22
8.3	0.7	7.7	0.1	8.5	0.9	8.0	0.4	7.9	0.3	8.0	0.4	7.5	-0.1
6.0	-1.1	5.4	-1.7	6.4	-0.7	6.9	-0.2	7.1	0.0	5.9	-1.2	5.4	-1.7
6.3	-1.3	6.1	-1.5	7.3	-0.3	7.3	-0.3	6.7	-0.9	7.0	-0.6	6.4	-1.2
6.4	0.4	5.4	-0.6	7.0	1.0	6.9	0.9	6.6	0.6	6.6	0.6	6.0	0.0
6.7	-1.0	6.0	-1.7	7.4	-0.3	7.4	-0.3	6.7	-1.0	7.6	-0.1	6.9	-0.8
6.1	-0.8	5.7	-1.2	6.0	-0.9	6.7	-0.2	5.9	-1.0	6.7	-0.2	6.3	-0.4
1.04	0.5	0.39	-0.2	1.09	0.5	0.38	-0.2	0.76	0.2	0.35	-0.2	0.54	-0.04
8.15	2.1	1.84	-4.2	9.91	3.8	1.3	-4.8	12.14	6.1	3.95	-2.1	3.72	-2.35
50.56	42.6	15.64	7.7	12.73	4.8	12.4	4.5	2.1	-5.8	19.4	11.5	6.18	-1.76
99.66	37.7	59.47	-2.5	61.48	-0.5	63.05	1.1	47.43	-14.5	49.12	-12.8	60.03	-1.92
52	-700.0	446	-306.0	413	-339.0	1409	657.0	0	-752.0	80	-672.0	847	95
0.06	-1.3	1.08	-0.2	1.23	-0.1	3.22	1.9	0	-1.3	0.14	-1.2	1.3	-0.02
2.79	-0.1	3.18	0.3	20.66	17.8	8.55	5.6	0.03	-2.9	4.86	2.0	3.13	0.22
94.7	2.1	77.2	-15.4	94.5	1.9	90.4	-2.2	97.2	4.6	93.7	1.1	89.0	-3.6
4.92	-1.1	4.05	-2.0	n/a		4.5	-1.5	5.33	-0.7	3.37	-2.7	3.95	-2.08
89.09	32.0	45.88	-11.2	70.05	12.9	53.57	-3.5	58.42	1.3	61.45	4.3	53.45	-3.66
n/a		-0.17	0.0	n/a		-0.05	0.1	n/a		-0.25	-0.1	n/a	
n/a		-0.12	0.0	n/a		-0.08	0.1	n/a		0.09	0.2	n/a	
n/a		0.36	-0.6	n/a		0.62	-0.3	n/a		0.6	-0.4	n/a	
A2		A3		A2		A3		A3		A2		A3	
NOK	Yes	EUR	No	DKK	Yes	EUR	No	ISK	Yes	EUR	No	EUR	No
7.4	-0.6	7.6	-0.4	8.0	0.0	8.4	0.4	6.5	-1.5	7.9	-0.1	8.0	0.0
82.62	-9.3	80.71	-11.2	87.99	-3.9	77.38	-14.5	93.85	2.0	85.45	-6.4	98.04	6.16
23.24	16.1	20.25	13.1	26.05	18.9	5.53	-1.6	n/a		27.4	20.2	18.34	11.18
19.2	6.8	22.9	10.5	22.9	10.5	9.6	-2.8	n/a		23.4	11.0	27	14.6
963		379		675		618		2026		1555		130	
5.2	-0.7	5.2	-0.7	5.1	-0.8	5.5	-0.4	5.4	-0.5	5.4	-0.5	5.4	-0.5
403.34	-505.7	2,715.52	1806.5	348.08	-561.0	3,845.63	2936.6	24.19	-884.9	268.76	-640.3	529.61	-379.46
75419.63	22971.8	40493.93	-11953.9	59822.09	7374.3	46258.88	-6189.0	66944.83	14497.0	48685.85	-3762.0	46116.7	-6331.13
1.4	0.1	1.2	-0.1	1.4	0.1	1.8	0.5	2.6	1.3	1	-0.3	1.2	-0.1
35725	6392.0	31304	1971.0	29606	273.0	34294	4961.0	31929	2596.0	29943	610.0	30364	1031
n/a		557,000	207200.0	n/a		2,646,598	2296798.0	918	-348882.0	79,939	-269861.0	79,594	-270,206
1.09	-0.2	1.39	0.1	1.16	-0.1	2.08	0.8	n/a		1.71	0.4	1	-0.3

Table A3. CAGE model results for top 10 countries. The Netherlands is used as benchmark.

Links to indicators, CAGE model

The links to the sources of all indicators from this model are available upon request to the author.

H. | Competitor analysis

Company	Category	Mentioned on homepage?		Customer experience	Sustainability	Partnership model	Solution description
		Cost savings	Operational efficiency				
Veerooute	Schedule and route optimisation software (API)	yes	yes	yes	yes	no	Fleet Management, Scheduling & Routing via API
Workwave	Schedule and route optimisation software (API)	yes	yes	no	no	yes	Workwave routing engine. Route Optimization Software For Your Delivery Business
Routific (engine)	Schedule and route optimisation software (API)	yes	yes	yes	no	no	Delight Your Customers With Fast Deliveries & Accurate ETAs. Delivery route optimization software & app.
PTV group	Schedule and route optimisation software	yes	yes	no	no	no	Transport planning and schedule optimisation
Descartes	Schedule and route optimisation software	yes	yes	no	no	no	Route planning and optimization
Conundra	Schedule and route optimisation software	yes	yes	no	no	no	Transport planning, route optimization
Routigo	Schedule and route optimisation software	yes	yes	yes	no	no	Combine routeplanning, registrations and live track to make the delivery experience outstanding
Urbantiz	Delivery management platform	yes	yes	yes	yes	yes	Intelligence driven platform to manage, optimise and orchestrate deliveries & logistics
Getswift	Delivery management platform	no	no	yes	no	no	Delivery management software
Tookan	Delivery management platform	yes	yes	no	no	yes	Build Your Delivery Management Services On Tookan. Enhance your delivery services with end-to-end route planning, automated dispatch and real-time tracking
Package.ai	Delivery management platform	yes	yes	yes	no	no	The first choice in last-mile automation. Our software autonomously manages last-mile fleets and interacts with customers.
Paragon routing	Schedule and route optimisation software	yes	yes	yes	no	yes	Advanced routing and scheduling software
Bringg	Delivery management platform	yes	yes	yes	no	no	SaaS technology to rapidly improve your pickup and delivery speed, capacity, and customer experience at scale. The delivery orchestration platform for enterprises.
Onfleet	Delivery management platform	no	yes	yes	no	no	The world's most advanced last mile delivery platform
Dispatch Science	Delivery management platform	yes	yes	no	no	no	Advanced Delivery management software
Milkman	Delivery management platform	yes	yes	yes	no	no	The Enterprise Delivery Management Platform
Dropcon	Delivery management platform	yes	yes	yes	no	no	Simple tools for great deliveries. Delivery Management platform
Routific	Delivery management platform	yes	yes	yes	no	no	Delivery route optimization software and app
Optiyo!	Schedule and route optimisation software	yes	yes	yes	no	no	Cloud-based route optimization and tracking for multi-stop routes
Adiona Tech	Schedule and route optimisation software	no	yes	yes	no	no	Delivery route and supply chain optimization
Geoconcept	Schedule and route optimisation software	yes	yes	yes	yes	no	Route and urban logistics optimisation
Fareye	Delivery management platform	yes	yes	yes	no	no	Logistics SaaS platform. FarEye's predictive logistics platform enables enterprises to orchestrate, track, and optimize their logistics operations
Locus	Delivery management platform	yes	yes	yes	no	yes	The best logistics planning and optimization software
Optimoroute	Delivery management platform	yes	yes	yes	no	no	Delivery route planning and field service scheduling
Wise systems	Delivery management platform	no	yes	yes	yes	no	Autonomous dispatching and routing platform
Fixlastmile	Delivery management platform	no	yes	yes	no	no	Last mile delivery software, logistics management system and solution
Cigo	Delivery management platform	no	yes	yes	no	no	Last mile delivery management simplified. Last mile management.
Total yes			79%	97%	79%	17%	21%
Total no			21%	3%	21%	83%	79%
Layers of competition				API only schedule and route optimisation software			
				Schedule and route optimisation software			
				Delivery management platform			
				Manual planning			
				TMS			
				Spreadsheet planning			

Table A4. Competitor overview, category, solution description and marketing activities.

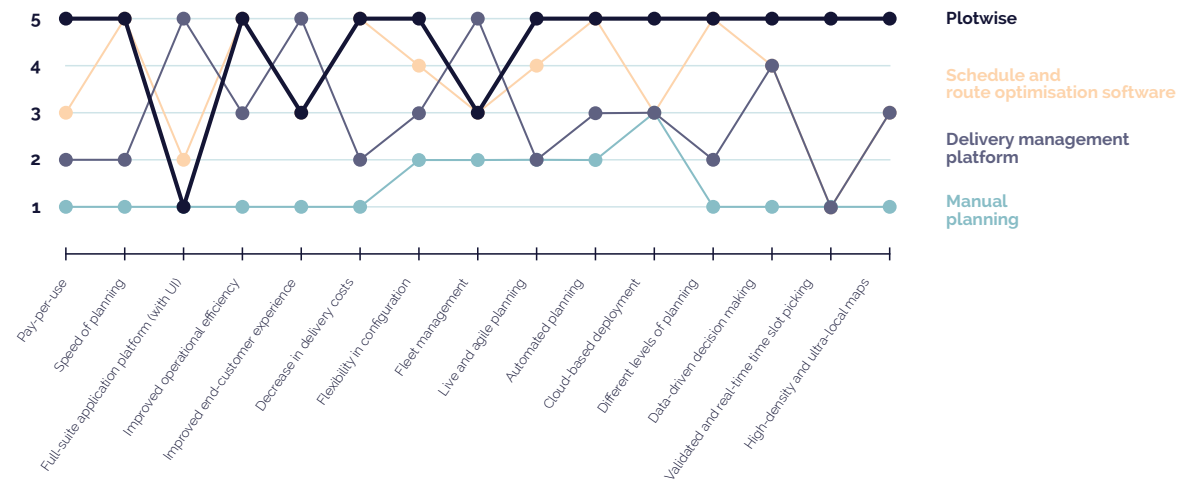


Figure A4. Value curve Plotwise versus competition categories.

Figure A4 shows a value curve that the author created based on his findings from internal and external research. The X axis shows factors of competition or product benefits, the Y axis shows the (perceived) level of offering. Please note that these scores are assumptions, a more detailed competitor study could result in different values. The aim of this value curve is to show in what areas Plotwise's solution outperforms the competition, and in what areas not. Following the theory of Kim and Mauborgne (2014), a company should not aim to outperform competition on all factors; it should rather make clear in what areas it excels and what factors are unique to industry.

I. | Sales personas

The author created a persona canvas and put in initial thoughts and assumptions. In an online meeting with a sales representative, the persona canvas was explained by the author of this thesis. They then created three categories of personas together. One canvas was then completed under guidance of the author. Afterwards, the sales representative got one week time to complete the other two canvases. After this week, in the second meeting, the sales representative presented his results and these were discussed. These personas serve as a first attempt; constant updating of the information as more market and buyer knowledge is obtained is advised.

The figures on the following pages present the results of these sessions, in the form of three personas. These personas are key decision makers and/or buyers; understanding their context is crucial when trying to get them aboard as customer. **Figure A5** shows one of the canvasses that was used to derive these personas. The other personas were created by the participants using the same template.

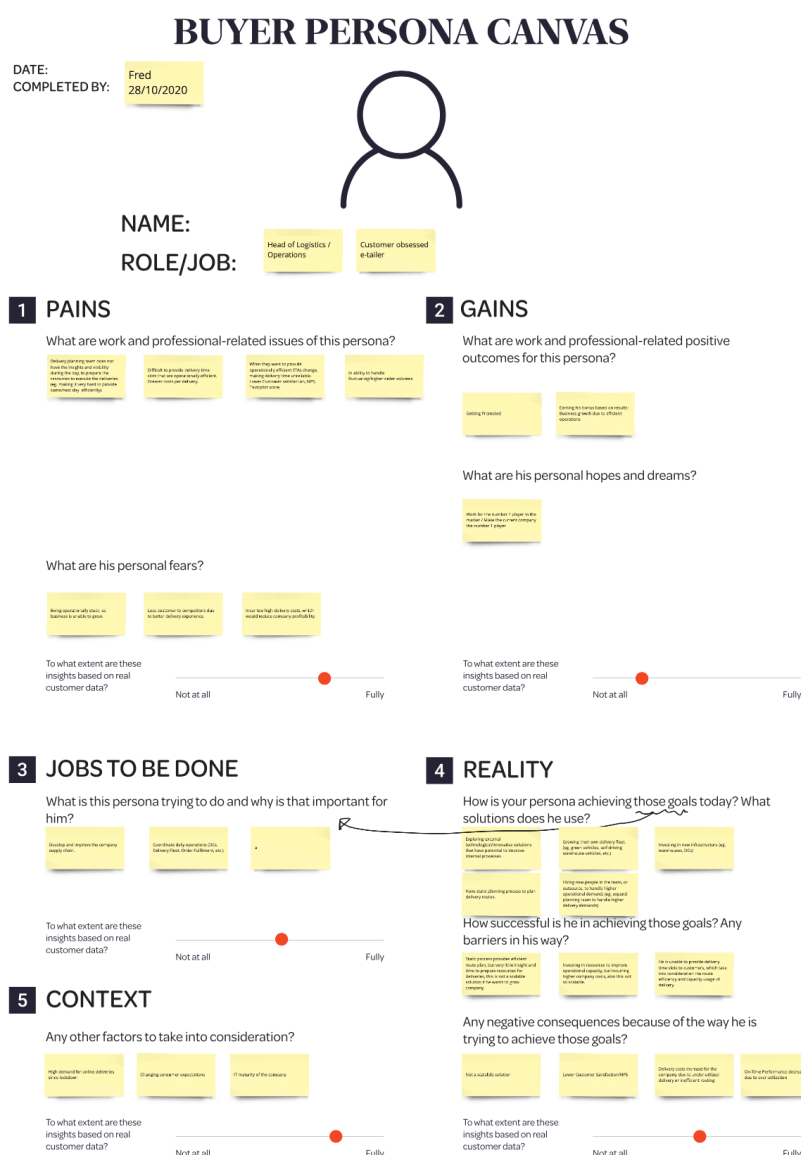


Figure A5. A completed buyer persona canvas, for Head of Logistics/Operations at an e-tailer.

Head of Logistics/Operations at Customer Obsessed E-tailer

1

Pains

What are work and professional-related issues of this persona?

Delivery planning team does not have the insights and visibility during the day to prepare the resources to execute the deliveries. This makes it very hard to provide same/next day delivery efficiently.

Difficult to provide delivery time slots that are operationally efficient. Higher costs per delivery.

When they want to be operationally efficient ETAs change, making delivery time unreliable. Lower customer satisfaction (NPS).

Inability to handle fluctuating/higher order volumes.

What are his personal fears?

Being operationally stuck, so business is unable to grow.

Lose customer to competitors due to better delivery experience.

Incur too high delivery costs, which would reduce company profitability.

3

Jobs to be done

What is this persona trying to do and why is that important to him?

Develop and improve the company supply chain.

Coordinate daily operations (DCs, Delivery Fleet, Order Fulfilment, etc.)

Executing delivery services in a cost efficient manner while ensuring customer delivery satisfaction.

5

Context

High demand for online deliveries since lockdown

Changing consumer expectations

IT maturity of the company

2

Gains

What are work and professional-related positive outcomes for this persona?

Getting promoted.

Earning his bonus based on results.

Business growth due to efficient operations.

What are his personal hopes and dreams?

Work for the number 1 player in the market / Make the current company the number 1 player

4

Reality

How is this persona achieving those goals today? What solutions does he use?

Exploring external technological/innovative solutions that have potential to improve internal processes

Growing their own delivery fleet. (eg. green vehicles, self-driving warehouse vehicles, etc.)

Investing in new infrastructure (eg. warehouses, DCs)

Have static planning process to plan delivery routes.

Hiring new people in the team, or outsource, to handle higher operational demand. (eg. expand planning team to handle higher delivery demands)

How successful is he in achieving those goals? Any barriers in his way?

Static process provides efficient route plan, but very little insight and time to prepare resources for deliveries, this is not a scalable solution if he wants to grow company.

Investing in resources to improve operational capacity, but incurring higher company costs, also this not so scalable.

He is unable to provide delivery time slots to customers, which take into consideration the route efficiency and capacity usage of delivery.

Any negative consequences because of the way he is trying to achieve those goals?

Not a scalable solution

Lower Customer Satisfaction/NPS

Delivery costs increase for the company, due to under-utilized delivery or inefficient routing

On-Time Performance decreases, due to over-utilisation

Head of E-commerce at Customer Obsessed E-tailer

1

Pains

What are work and professional-related issues of this persona?

Difficulty to influence customer delivery experience after sales on e-commerce website into and ensure customer satisfaction/high NPS

Inability to offer additional services to customers (same day/next day, time slot picking) --> because it's hard to plan

Cannot offer accurate or attractive time slots to customer at check out -> Lose sales opportunity to customer

Keep delivery promise to customers -> but hurt operational efficiency (eg. they accept all time slots chosen by customers without looking at cost per delivery)

Unable to get more sales through e-commerce website in one due to early cut-off point, which is need to plan next day deliveries.

What are his personal fears?

Being unable to influence customer delivery experience after sales on e-commerce website into and ensure customer satisfaction/high NPS

Being unable to commit to promises to customers

Lose customers to competitors due to better delivery experience.

3

Jobs to be done

What is this persona trying to do and why is that important to him?

Develop and improve the company e-commerce website -> to ensure customer conversion and retention

improve customer NPS/Trustpilot score -> increase customer retention and repeat sales

Ensure a positive customer journey from UX on website to experience of delivery -> increase customer retention and repeat sales

5

Context

High demand for online deliveries since lockdown

Changing consumer expectations

IT maturity of the company

2

Gains

What are work and professional-related positive outcomes for this persona?

Getting promoted.

Earning his bonus based on results.

Business growth due to better online sales experience

What are his personal hopes and dreams?

Develop number 1 e-commerce website and have company with highest NPS

4

Reality

How is this persona achieving those goals today? What solutions does he use?

Offer Additional premium services such as same/next day delivery

Suggest delivery time slots to customers

Provide a smooth Checkout process

He is unsure what solutions to use or how to achieve these goals

How successful is he in achieving those goals? Any barriers in his way?

Lack of coordination between delivery time slots suggested and the delivery fleet's ability to ensure those delivery ETAs

The company doesn't have the operational capacity to plan same/next day deliveries or narrow time slots or continuously improve their delivery

He/She has little influence on the customer delivery experience --> it's mainly under the influence of the Head o Delivery/Logistics/Operations

Unable to offer delivery time slots based on company delivery resources (number of avialable drivers/trucks

Any negative consequences because of the way he is trying to achieve those goals?

Harms Customer Satisfaction/NPS/Trustpilot score

Lose customers to competitors who can offer better service

Reduces e-commerce sales

Reduces company revenue

Head of IT/Digital Transformation at Customer Obsessed E-tailer

1

Pains

What are work and professional-related issues of this persona?

Issue with IT infrastructure or planning software to handle weight of delivery operations.

What are his personal fears?

Being unable to provide the IT infrastructure needed to support online sales and delivery operations.

Being unable to commit to promises to customers because the systems don't work properly.

Lose customer to competitors having better online platform and delivery experience.

2

Gains

What are work and professional-related positive outcomes for this persona?

Earning his bonus based on results.

Business growth due to fully aligned IT process (e.g. better online sales experience, data driven operations)

What are his personal hopes and dreams?

Build a sound IT/Digital infrastructure that enables smooth processes throughout the company, especially between E-Com and Delivery Ops

Implement Digital system that helps Grow online sales and delivery operations.

3

Jobs to be done

What is this persona trying to do and why is that important to him?

Lead implementation process of new technologies throughout the company

Develop and improve the company IT/Digital infrastructure

Implement technologies and software to improve internal processes (E-com and Delivery operations)

4

Reality

How is this persona achieving those goals today? What solutions does he use?

ERP Systems that connect the different departments and business functions

Implement Static/Batch planning software to plan delivery routes

Implement technologies and software to improve internal processes (E-com and Delivery operations)

How successful is he in achieving those goals? Any barriers in his way?

Static Planning software traditionally require 1 big payment

Static Planning software does not consider dynamic changes in delivery requirements (change in resources/vans/driver, online order errors, online order changes)

Static Planning software is not scalable, will not improve with respect to time needed to plan

Static/Batch Planning engines do not consider customer needs and dynamic operations

5

Context

High demand for online deliveries since lockdown

Changing consumer expectations

IT maturity of the company

Any negative consequences because of the way he is trying to achieve those goals?

High implementation cost

Planning team needs to manually insert order after cut-off point, thereby increasing cost of delivery and risk of unreliable ETAs

Underutilized capacity, results in higher cost of delivery

Overutilized capacity results in inability to keep promise to customer, this hurts NPS/Customer Experience

J. | Sustainability in last mile delivery

How to make the last mile more sustainable

A way to improve distribution structure is by establishing delivery hubs and urban consolidation centres. This might be a good way to improve efficiency and speed and thereby meet consumer demands, but it can still be unsustainable without updating the delivery fleet or changing the energy grid to power the operations (Reuters Events, 2012). Currently, approximately 70% of energy used in distribution buildings is non-renewable (International Post Corporation, 2020).

Moreover, urban consolidation centres are often not economically viable because they need an extra transfer of goods, from vehicle to consolidation centre to vehicle (European Environment Agency, 2019). Although the distribution strategy is a key determinant in increasing energy efficiency, it is primarily a task for logistics operators, e-tailers, retailers and brands, and therefore not within the current scope of Plotwise.

Transportation execution, on the other hand, is highly dependent on planning solutions like Plotwise's. Within commercial transportation, energy consumption is strongly influenced by vehicle size, utilisation rate (Halldórsson & Wehner, 2020) and driven route. Hence, operators that offer home delivery seek to improve route planning and aim for more efficient deliveries. This is exactly what Plotwise can help with.

Lowering transportation emissions can also be achieved through decreasing the failure rate of deliveries. This can be achieved through avoiding misloads and improving compliance with communicated delivery times or time windows (European Environment Agency, 2019). Edwards et al. (2010) calculated that the emissions of a van-based delivery equals 181 grams of CO₂ if successfully delivered the first time. However, at a 12% and 25% failure rate, these emissions would respectively increase to 203 and 226 grams of CO₂. According to the European Environment Agency (2019), a second delivery attempt can even increase emissions by 9 to 75%. Hence, more streamlined delivery operations are favourable for greener outcomes. An additional positive effect of better on time performance is increased end customer experience.

Consumers also play a role in making the last mile more sustainable. Household logistics capability entails the end consumer's role in collecting and receiving goods (Halldórsson & Wehner, 2020); thereby partly influencing the delivery failure rate. The consumer can choose to play an active role through collecting goods (e.g. via pick-up points or stores) or a passive one in which he opts for home delivery.

According to Joerss et al. (2016), delivery models in which consumers have an active role, e.g. when delivering to parcel lockers, do not appeal to consumers at the moment. Consumers assign high value to home delivery; only if home delivery would be 3 Euros more expensive than a pick-up elsewhere, 50% of respondents would prefer to use the latter option. Costs for home delivery are not significantly higher than for delivering at pick-up points.

Home delivery is currently the most demanded delivery model worldwide (Reuters Events, 2020). Nevertheless, it must be noted that consumer delivery preferences differ across countries.

Home deliveries can be categorized as either attended or unattended deliveries (Halldórsson & Wehner, 2020). Attended home deliveries have the highest failure rates because the recipient must be home. According to Halldórsson and Wehner (2020), average till good failure rates are between 12,5% for normal home deliveries and 25% for deliveries that require a recipient signature.

N. | Project brief (approved)

The international growth strategy of an AI logistics planning company project title

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

start date 31 - 08 - 2020 29 - 01 - 2021 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, ...).

Plotwise is a Delft-based company that aims to shape the future of same and next day delivery in the urban logistics landscape. The company was founded in 2018 and now consists of about 30 team members that focus on software development, sales and management of the company.

Lelian Net (COO) and Floor van Gageldonk (Head of Sales) will both be involved in this graduation project. Floor is the key stakeholder in this project and will be my first point of contact and company mentor. Lelian will be the second point of contact and will be kept informed during the entire project.

Plotwise offers a data-driven route optimizer software solution. They sell a Planning API directly to delivery operators and e-commerce companies that enables them to optimise their last mile delivery planning, improve their customer experience and reduce their carbon footprint. Current customers include Coolblue (Dutch e-commerce platform), PostNL (Dutch mail, parcel and e-commerce corporation) and Red je Pakketje (Dutch parcel delivery company). Plotwise operates in a fast-growing market, in which "deliver what you promise" has become an important endeavour for its customers.

The company currently operates on the BeNeLux market only. However, amongst others, Floor and Lelian believe that the amount of clients on the BeNeLux market is limited to around ten. They believe there aren't more large corporations in the BeNeLux logistics market that could buy the current product offering.

Hence, to increase turnover and the number of customers, which are both key drivers of the company, it has become evident that sales activities should become more internationally oriented.

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introduction (continued): space for images

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Personal Project Brief - IDE Master Graduation

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.

The current short-term goal (12-18 months) is to expand the current product offering to the UK, Germany, France and the Nordics. These countries have already been pre-selected by the company based on potential volume of sales.

However, firstly, the key stakeholder would like to know if the abovementioned countries are indeed the right countries to approach, and how he should make this decision. The company lacks an overview of the competitive landscape of international markets and wishes to have indicators to correctly assess new markets beyond potential volume of sales.

Secondly, the go-to-market strategy (i.e. mode of entry, speed) per market are yet to be researched and defined.

Thirdly, the company has a clear vision on their product and value proposition: stick to the current product. However, the company would like to know if and how they should adjust the value proposition when entering selected foreign countries.

Hence, the main question that will be researched in this thesis is: "how can Plotwise grow its business within the European last-mile delivery space in the coming 3 years?"

This is a design project because it develops insights for business development through co-creative and explorative design methods. The insights generated from these insights will then inform a cycle of development and testing of a design framework.

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.

My goal is to design a strategic (decision) framework that supports the commercial department of Plotwise in designing an international growth strategy. I will then use this framework to deliver elements of the go-to-market strategy for selected foreign countries taking into account desirability, viability and feasibility. In order to execute this project in a structured way, I will follow an adjusted version of the Double Diamond methodology (1).

Activities per phase:

Phase 1 (Discover & Define):

Interviews with management and employees and reading internal documents to create a status quo of Plotwise (people/culture, product, business model) and to understand corporate objectives; Literature review and synthesis on e.g. "international market entry", "international market selection", "entry mode selection", "ecosystems" to create a theoretical strategic framework for designing a Foreign Market Entry Strategy. Co-create this framework with client.

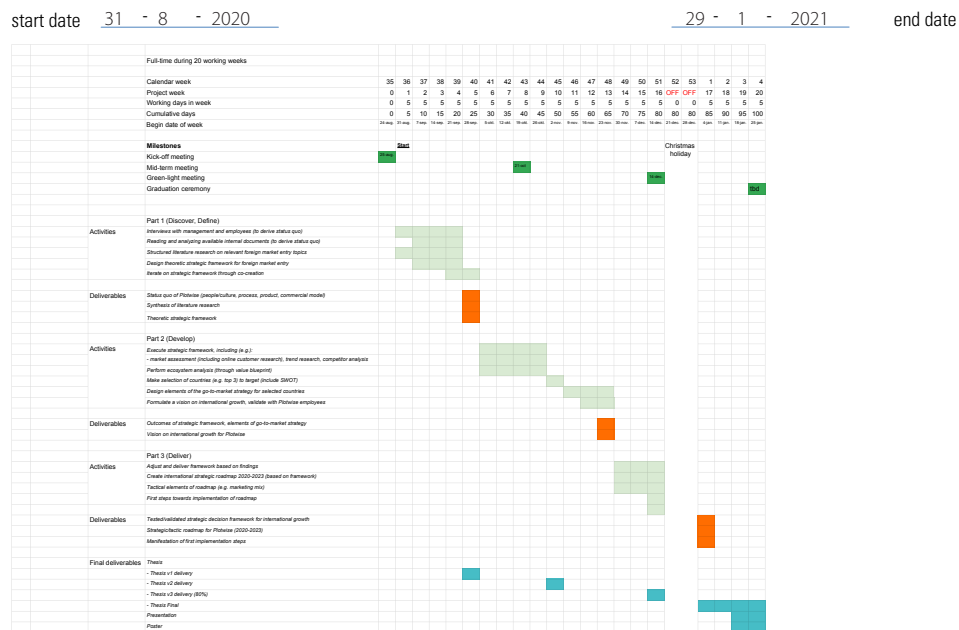
Phase 2 (Develop): Execute the theoretical framework, which will include market assessment (including customer research), trend research, and competitor analysis, to make a selection of countries to target. Analyse ecosystems of foreign markets, conceptualise the position of Plotwise within that ecosystem (e.g. through "value blueprint" method (2)). Design elements of the go-to-market strategy for a selection of countries. Formulate a vision on international growth and validate if it fits with Plotwise (e.g. with the company culture).

Phase 3 (Deliver): Adjust and deliver the strategic framework based on findings, create an international strategic roadmap for 2020-2023 which implements the outcome of the decision making framework, possibly supported with tactical elements, e.g. global marketing mix.

Personal Project Brief - IDE Master Graduation

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.



Important dates:
 Kick-off: week 35 (start of project Monday 31/8 in week 36)
 Mid-term evaluation: week 43 (October 21st)
 Green-light: week 51 (December 14th)
 Graduation ceremony: week 4 (to be determined)

Fixed meetings:
 Weekly meeting with company mentor
 Bi-weekly meeting with chair (around 10 hours total, 20 hours for other activities)
 Bi-weekly meeting with coach (around 10 hours total, 20 hours for other activities)
 Quarterly meeting with chair, coach and company mentor

Full-time for 20 working weeks.

MOTIVATION AND PERSONAL AMBITIONS

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

Why this project?

I'm interested in this intersection of e-commerce, last-mile delivery and software and want to gain more in-depth knowledge on these topics
The project allows for the combination of innovation through design (which fits to previous professional experience) and the business side of design in a B2B context. Interested to learn more about putting emphasis on the viability aspect of any strategic design.
Small company size: possible to make impact and be in touch with management-level employees
Management/strategy consultancy-like approach, will prepare me for the career I aspire.
Like to introduce the ecosystem view in the project as well, something I haven't implemented thoroughly in previous projects.

Competences to prove:

Synthesis of acquired data
Business-side of strategic design (use of quantitative methods in combination with creative techniques, combination of design and business principles)
Combination of knowledge derived from internship during elective semester (innovation consultancy) and part-time job as account manager at Internet of Things R&D company
Multi-stakeholder project management

Competences to learn and improve:

Stakeholder management and communication
Conducting primary research (e.g. interviews and surveys)
Executing creative techniques in a professional setting
Growing business-sense and combining it with strategic design
Real implementation of strategic research and outcomes, going beyond writing the report only

FINAL COMMENTS

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

- (1) designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond
- (2) Book "The Wide Lens, a new strategy for innovation" by Ron Adner (2012)

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