

'Wavect'

"The first real social network."

Content

igur	es		F
Гable	s		G
1.	Public	c / Non-Confidential Summary	1
2	1.A. E	English-Version	1
-	1.B. G	German-Version	1
2.	Conta	nct	1
3.	Elevat	tor-Pitch	2
3	3.A. E	English-Version	2
3	3.B. G	German-Version	2
4.	Execu	itive summary	2
5.	Vision	1	3
į	5.A. N	Mission	3
6.	Imple	mentation	4
(6.A. S	Software Architecture	4
	6.A.i.	Database	5
	6.A.ii.	GetStream.io	5
	6.A.iii	. Backend Core	5
	6.A.iv	. Web Application	5
	6.A.v.	Mobile Application	5
	6.A.vi	. Desktop Application	6
(6.B. C	Deployment	6
(5.C. S	Scalability	6
(6.D. C	Customer Service	6
(6.E. V	Nireframes	6
(5.F. N	Mockups	9
	6.F.i.	UI Flowcharts	9
7.	Oppoi	rtunity	9
7	7.A. lı	nteresting stats	9
8.	Execu	ition	. 11
8	8.A. P	Project Management – Tools	. 12
	8.A.i.	Trello	. 12
	8.A.ii.	Google Calendar	. 12



	8.A.iii.	Skype	12
8.A.iv.		Slack	12
	8.A.v.	WhatsApp	12
	8.A.vi.	GitHub	13
	8.A.vii.	Dropbox	13
8	.B. Proj	ect Structure Plan (PSP)	13
	8.B.i.	Milestones	14
	8.B.ii.	Software Requirements	15
	8.B.iii.	Prototyping	15
8	.C. Lice	nses	16
8	.D. Test	ting phase	16
	8.D.i.	Open Beta-testing	17
8	.E. Gro	wth strategy	17
	8.E.i. N	1arket penetration	17
8	.F. Inte	llectual property rights (IPR) strategy	18
	8.F.i. C	oncept Protection	18
	8.F.ii.	Trademark/Design Protection	18
	8.F.iii.	Protection of IPR	19
9.	Team an	d company	19
	9.A.i.	Christof Jori	19
	9.A.ii.	Mariella Galneder	19
	9.A.iii.	Reza Shokri, Bsc	19
	9.A.iv.	Kevin Alfred Riedl, Bsc.	19
	9.A.v.	Ing. Daniel E. Gosterxeier	19
9	.B. Wo	rk-for-Equity	20
9	.C. Mar	nagement	20
	9.C.i.	OKR – Objectives Key-Results	21
	9.C.ii.	Weekly meetings and collaborative work	21
	9.C.iii.	Task disclosure	22
	9.C.iv.	Anonymous complaints	22
	9.C.v.	Mantra	22
	9.C.vi.	Pessimist & Optimist	22
10.	Financ	ial plan	22
1	0.A. R	evenue Streams	22
	10.A.i.	Fan-Products	23
	10.A.ii.	Events	. 23



	10.A.iii.	Paid challenges	23
	10.A.iv.	Sponsored challenges	24
	10.A.v.	Commercial/Business license	24
1	0.B.	Expenditures	25
	10.B.i.	On/After foundation	25
	10.B.ii.	Marketing	26
	10.B.iii.	Travel expenses	26
	10.B.iv.	Wages	26
	10.B.v.	Hosting	26
	10.B.vi.	Operation Costs	26
11.	Mark	eting & Sales	27
1	1.A.	Concept	27
1	1.B.	Branding	28
	11.B.i.	The face/representative	28
	11.B.ii.	Storytelling	29
	11.B.iii.	Slogans	29
1	1.C.	Advertising	29
	11.C.i.	Print-Media	29
	11.C.ii.	Online-Marketing	29
	11.C.iii.	Own CSR	29
	11.C.iv.	Event-Management	29
12.	Mark	et	30
1	2.A.	Business Model Canvas	30
	12.A.i.	Target audience	30
	12.A.ii.	Distribution Channels	32
	12.A.iii.	Customer relationships	32
	12.A.iv.	Key-Partners	33
	12.A.v.	Key-Activities	33
	12.A.vi.	Key-Resources	34
1	2.B.	Value Proposition Canvas	34
	12.B.i.	B2C	34
	12.B.ii.	B2B and B2G	35
1	2.C.	Environment Analysis	36
1	2.D.	Market research	37
	12.D.i.	Survey: B2C	37
	12.D.ii.	Survey: B2B/B2G	38



1	2.E.	Competitors – Direct comparison	38
1	2.F. M	arket Assessment	39
	12.F.i.	Total-Addressable-Market (TAM)	40
	12.F.ii.	Serviceable-Addressable-Market / Served-Available-Market (SAM)	41
	12.F.iii	Serviceable-Obtainable-Market (SOM)	42
1	2.G.	Blue Ocean Shift	43
	12.G.i.	Pioneer-Migrator-Settler Map	43
	12.G.ii.	Eliminate-Reduce-Raise-Create Grid	45
	12.G.iii	. Four Hurdles to Strategy Execution	45
	12.G.iv	. Three Tiers of Noncustomers	46
	12.G.v.	Strategy Canvas	47
13.	Chal	lenges	50
1	3.A.	Challenge constraints	50
1	3.B.	New challenges	50
	13.B.i.	AI (machine learning)	51
	13.B.ii.	Proposed by companies	51
	13.B.iii	. Provided by Wavect	51
	13.B.iv	. Provided by users	51
	13.B.v.	Reusable challenges	51
1	3.C.	Quality management	51
	13.C.i.	QM for 0-100 users	51
	13.C.ii.	QM for 101-1000 users	52
	13.C.iii	. QM for 1001-10,000 users	52
	13.C.iv	. QM for 10,001-n users	52
1	3.D.	Challenge verification	52
	13.D.i.	Ask a friend	52
	13.D.ii.	Video/Picture	52
14.	Prof	iles	53
1	4.A.	Profile verification	53
15.	Lega	l	53
1	5.A.	Data privacy	53
1	5.B.	Copyright – Upload Filter	53
16.	Cont	roversial	54
1	6.A.	Anti-Mobbing Measures	54
1	6.B.	User reputation – Retain Dignity	54
17	۸tta	chments	1



17.A.	Financial Plan	l
17.B.	Curriculums of team members	l
17.C.	Non-Disclosure-Agreement	l
17.D.	Big/Detailed figures	l
References	I	l



Figures

Figure 1: Software Architecture	4
Figure 2: Basic Wireframe for all pages (Desktop)	7
Figure 3: Timeline-Wireframe (Desktop)	7
Figure 4: Company profile, Wireframe (Desktop)	8
Figure 5: User-Profile, Wireframe (Desktop)	8
Figure 6: Challenges, Wireframe (Desktop)	9
Figure 7: Project Structure Plan	14
Figure 8: Software Requirements - List	15
Figure 9: Prototype phases	16
Figure 10: Licenses of potentially used technologies	16
Figure 11: Testing phases	17
Figure 12: Brand essence - Matrix	
Figure 13: Business-Model-Canvas [attached]	30
Figure 14: Value-Proposition-Canvas for B2C, undifferentiated/segmented market [attached]	34
Figure 15: Value-Proposition-Canvas for B2B & B2G, all sizes of organizations [attached]	35
Figure 16: Environment Analysis [attached]	37
Figure 17: Market research, B2C survey	38
Figure 18: Market Assessment	40
Figure 19: Pioneer-Migrator-Settler Map	43
Figure 20: Eliminate-Reduce-Raise-Create Grid	45
Figure 21: Four Hurdles to Strategy Execution	46
Figure 22: Three Tiers of Noncustomers	46
Figure 23: Strategy-Canvas, B2B	47
Figure 24: Challenge Creation - Possibilities	51
Figure 25: Quality management for 1001-10,000 users	52
Figure 26: Quality management for 10,001-n users	52



Tables



1. Public / Non-Confidential Summary

The protection of concepts and software itself is hard to almost impossible (see 8.FIntellectual property rights (IPR) strategy, p. 18, below). Thus, everything in this business plan is considered confidential and is subject to our internal Non-Disclosure-Agreement which has been signed by every team-member (see 9. Team and company, p. 19, below). The same applies to every (extern) evaluator if you have signed an own NDA to your organization. People who have not signed any NDA and have no explicit permission to view this document are asked to annihilate all related data. If you don't have any permission to view this document, please contact us (see 2. Contact, p. 1, below), sign and submit our attached NDA (see 17.CNon-Disclosure-Agreement, p. I, below) before reading any further. Following **highlighted** and **quoted** summary is excluded from those regulations and may be published. The public visible summary is also available in German (see 1.B German-Version, p. 1, below).

1.A. English-Version

"The three most challenging problems our today's society are one's health, the protection of our environment as well as the shrinking social interaction. Such big problems cannot be solved by single organizations nor governments. People have to collaborate collectively. The vision of our enterprise is exactly that, bringing people and working together.

We want to solve those issues with a complex, collaborative software and related physical events. Our software aims to provide incentives to do something good related to one of those three problems. We respect the privacy of our users and don't sell any personalized data. Instead of regular ads we offer enterprises and organizations in the public/private sector the possibility, to give our users more incentives to be better than the day before, to make the world better than the day before. By doing that organizations can enhance one's reputation by somewhat outsourcing Corporate-Social-Responsibility instead of booking mostly ineffective ads, even if personalized.

Even Non-Profit-Organizations or institutions in the public sector, e.g. communes, can profit from our software. Our platform makes it possible that e.g. inhabitants or tourists (e.g. Backpacker) might be motivated to clean specific routes or doing other necessary tasks for the common-good."

1.B. German-Version

"Die drei größten Probleme unserer heutigen Gesellschaft ist die Gesundheit des Einzelnen, der Schutz unserer Umwelt und die schwindende soziale Interaktion. Solch große Probleme können nicht von einzelnen Organisationen oder gar Regierungen bewältigt werden. Menschen müssen demnach kollektiv zusammenarbeiten. Die Vision unseres Unternehmens ist daher genau das zu erreichen.

Lösen möchten wir das Ganze mithilfe einer komplexen, kollaborativen Software sowie damit zusammenhängenden, regelmäßigen Events. Die Software gibt Menschen/Usern im diesem Zusammenhang Anreize etwas Gutes bzw. Förderliches in Bezug auf einen der drei Problematiken zu unternehmen. Die Software verkauft keine personalisierten Daten. Statt regulärer Werbung wird Unternehmen oder anderen privaten/öffentlichen Einrichtungen die Möglichkeit gegeben, Usern zusätzliche Anreize zu bieten und dadurch das eigene Image aufzubessern. Statt datenaufwändiger und oftmals ineffektiver Werbeanzeigen wird Organisationen auf diese Weise eine Plattform für das sogenannte "Corporate Social Responsibility" geboten, um so auch die eigene Reputation aufzubessern.

Auch Non-Profit-Organisationen oder öffentliche Institutionen, wie z.B. Gemeinden, können von dieser Software profitieren. Unsere Plattform bietet diesen nämlich die Möglichkeit, Einwohner oder gar Touristen (z.B. Backpacker) zum Aufräumen oder anderen notwenigen Tätigkeiten zu bewegen.

In Bezug auf unser Unternehmenskonzept ist es wichtig, authentisch zu bleiben und wenn möglich im Interesse der allgemeinen Gesellschaft zu handeln."

2. Contact

Feel free to contact us at any given point of time.

E-Mail: kevin.riedl@wavect.io

Mobile: +43 650 30 566 44



3. Elevator-Pitch

Elevator-Pitch in under 400 chars.

3.A. English-Version

"CSR becomes increasingly important for organizations. Regular ads lose their effectiveness, which leads to the need of collecting more and more data. By giving people incentives (rebates, products, ...) to do something good (environment, social-interaction, health), we can offer a new kind of marketing campaign. Organizations can sponsor/pay challenges and thus outsource their CSR."

3.B. German-Version

"CSR gewinnt täglich an Relevanz. Reguläre Werbeanzeigen werden laufend ineffektiver, was Konzerne zum Sammeln von immer mehr Daten bewegt. Mit Anreizen (z. B. Rabatte, Produkte, ...), um etwas Gutes zu tun (Umwelt, soziale Interaktion, Gesundheit) können wir eine neue Art von Marketing-Kampagne anbieten. Organisationen können Herausforderungen sponsoren/bezahlen und so deren CSR outsourcen."

4. Executive summary

The general idea behind this new form of social network is to encourage social interaction in the real world, to protect the environment, animate people to live a healthier life and to make everyone's day a little bit better. The overall goal is that people work together across boundaries, cultural differences and all age groups to get everyone to act as part of humanity instead of acting as pure individuum (selfish-thinking).

This social network is not supposed to be a platform where people can share random pictures, videos or other documents. Users have profiles and can interact (comment, like, share, ...) with other people's achievements. A profile consists typically only of a profile picture, a cover picture, a user slogan and a timeline consisting of already accomplished challenges. The basic idea is to provide all users with daily, weekly, monthly, yearly and life-time challenges, which are all aiming to make the world a better place. Challenges are categorized according to their superior goal (e.g. healthcare, environment, social-interaction, ...) and their duration (daily, weekly, monthly, yearly, life-time challenges).

Example challenges could be (duration of such a challenge can vary):

- "Approach two strangers and try to have a short, friendly conversation."
- "Gather 5 cigarette stubs from the ground and dispose them properly."
- "Hold the door open for at least 1 person."
- "Eat at least one banana."

After marking a challenge as completed a user can upload a picture/video/sound-file to prove that he completed it properly. Users can also ask friends to confirm that they did the challenge and every achieved challenge will be posted on the user's timeline automatically. Those posts can be rated by users. If e.g. at least 10 people rated a post and the average rating is below a certain value, the post could be deleted automatically or will be sent to 'Wavect' for a review. (see Challenge verification, p. 52, below)

Besides the good feeling (which is enough for many people to contribute to a forum), getting in touch with new people when accomplishing a challenge, users can win/earn e.g. voucher codes, products, rebates or even earn money from companies by accomplishing some sponsored challenges. All sponsored items are raffled under those accounts who solved certain challenges. Users are only eligible to win a sponsored product when they met the required criteria of the challenge itself (e.g. proof via video/picture or/and confirmation by at least one friend, certain rating/reputation, etc.).



Every challenge is personalized via Machine-Learning, which means that users only receive challenges (what's important to you: environment or solidarity?) & prizes (e.g. a beauty box is tendentially more relevant for women) which are interesting & relevant for them.

The impact of all challenges is aggregated and published. Which means that every user and organization can see how much and which impact they and others had on our small world. From data like this, media published by users (watermarks will be added) and other statistics, we generate a unique and moving marketing campaign for our sponsors via Machine-Learning.

Additionally, each account has a public reputation. The reputation goes up when a user accomplishes a challenge (when well rated) and decreases when a post receives negative ratings or violated community standards. The idea behind that reputation will be that people can add it to their CV as an indicator for volunteer work or to show their commitment (environment, etc.) to certain fields in general. Therefore, the reputation of each user will be calculated from three sub-reputations (environment-, social- and health tasks).

As stated before, companies can issue voucher codes or products to sponsor certain challenges. Companies itself have an account too. In contrast to regular users, companies have two reputations.

- The first reputation is the same as the regular users' reputation. Which means that employees
 of a company can accomplish challenges too (companies are excluded from all raffles). By
 participating to such challenges, companies can achieve a better working atmosphere,
 employee morale within their company and could strengthen the attachment of their
 employees to their enterprise at no additional cost.
- 2. The second reputation depicts how many challenges they sponsored (e.g. vouchers/products). The better the reputation the more a company could say that they care about the environment, people, etc. which might be a possible marketing campaign for their own company.

5. Vision

Our long-term vision is to make the world a better place. Thus, we hope for a future where people treat each other better by doing small things which will make a huge impact when many people do it too. We want that people work together across boundaries to save our environment, keep themselves healthy and to transform social interaction into a pleasure instead of being a necessary evil. The world should be a place where people jump out of their beds and are eager to go to work and are fulfilled in every task they do. We take the fight against xenophobia, racism, dishonesty and war. Tolerance should be obsolete. People should stop to think in categories.

5.A. Mission

Wavect should be associated with good deeds, altruism and sincerity. We aim to make everyone's day better, to change the way how people think about the world and to be the reason for more fulfilling moments. By giving people incentives to do something good and providing organizations with the possibility to outsource their Corporate-Social-Responsibility we aim to be a global market leader in that field as there is no comparable service at that time. We aim to be a sustainable and more effective alternative to today's ads and want to overcome the general trade-off between being profitable and doing good.



6. Implementation

'Wavect' is some sort of social network, which should be accessible via Desktop- and mobile devices. The application will be implemented as responsive web-application by using React with Typescript.

Mobile devices can use the social network via the website (web-app will be responsive) or via an App. We plan to use React Native with TypeScript to be cross-platform and have a quite good user experience. In a mobile-world the mobile-application will be developed first.

6.A. Software Architecture

We spent months to search for scalable, mature, modern, efficient and easy to use technologies. After that phase we decided to settle for following software architecture (see Figure 1, p. 4). Moreover, we decided to use a so-called event-driven architecture to decouple our components. To reduce complexity, we decided to not use a microservice architecture at this point, as it is simply too early.

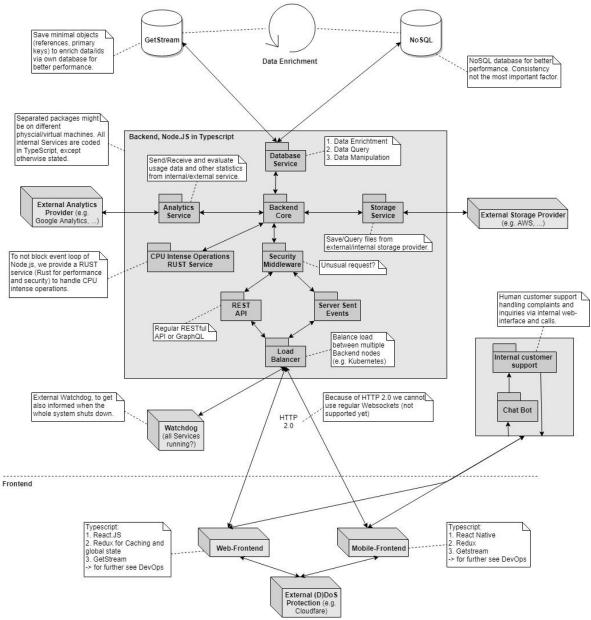


Figure 1: Software Architecture



6.A.i. Database

Choosing the right database is always one of the toughest decisions. We switched multiple times between SQL databases (e.g. MySQL, PostgreSQL) and NoSQL (e.g. MongoDB, CassandraDB)/Graph-Databases. The main trade off might be well known: Consistency <> Speed/Scalability

Although, current trends have shown that many big companies (e.g. Google, ...) switch back their NoSQL databases to SQL, we decided to go for a NoSQL/Graph database as a social network might be one of the most prominent use cases for NoSQL/Graph Databases. Additionally, as we use TypeScript our NoSQL data sets can be mapped a lot easier to an object than with relational databases. Horizontal scaling and better performance are other factors which helped us to make this decision. Nevertheless, we didn't select a specific NoSQL/Graph Database yet and will need to do a lot of benchmarking with our prototypes.

6.A.ii. GetStream.io

At the beginning we tried to create our own newsfeed logic (e.g. Server-Sent-Events, RESTful API or with HTTP 1.1 web sockets, Redux, ...). We succeeded but recognized that we need to implement a lot more features to get the results what we want. Additionally, our custom newsfeeds might not be as scalable as those provided by external providers. Therefore, we decided to switch to Getstream.io by using their React components and using their API (which is to a certain amount free). As a result, we were able to create a simple newsfeed (with a lot more features than our own) within minutes. Sometimes it's just better to build on already existing solutions (see 10.B.vi.1 GetStream, p. 26).¹

6.A.iii. Backend Core

Our Backend is mainly written in Typescript by using Node. JS and the framework Express. CPU intense and security sensitive operations are outsourced to our internal RUST service. When everything is in production and we might switch in the Backend to Go² instead of Typescript as Go is faster and easier to scale. The reason why we use Typescript right now is to increase developer productivity and development speed as we use Typescript in the Frontend as well.

6.A.iv. Web Application

Currently, we plan to use TypeScript on the Frontend in combination with React, Redux (for caching and global state), react-lazy (for reducing API calls) and the react-router (for improving user experience). The web application will be connected to a server-sent-event channel to receive events in real-time by subscribing to it. Data from the frontend to the backend will be sent via a RESTful API. All connections will be handled via HTTP 2 which is the reason that we don't use regular web sockets, but server-sent-events in combination with a restful API as they only work with HTTP 1.1 at the moment. To increase our organic reach, we will put a lot of effort into our search engine optimization (= SEO). Additionally, in Google AdWords etc. will be invested.

6.A.v. Mobile Application

Instead of React, we will use React Native for our mobile applications (cross-platform). Similar to SEO for our web application, we will spend a lot of time for App-Store-Optimization (= ASO) too. The rest of the implementation will be quite similar to the web application.

¹ (Stream.io Inc., 2018)

² (Griesemer, Pike, & Thompson, 2019)



6.A.vi. Desktop Application

Electron becomes increasingly popular and famous applications like Slack, ... use it. Therefore, we decided to make our Web-Application accessible via an Electron-Desktop-Application to give our users also a native user-experience without recoding the whole application.

6.B. Deployment

To easily deploy our services and also have the possibility to migrate to other nodes without too much hurdles we decided to create Dockerfiles for all of our services to build production-ready images and start containers out of them. Dockerfiles for our Web-Frontend and Backend are already built and get tested on every Git (= Version Control System, VCS) push.

Additionally, using Docker makes it easier to migrate our services later to Kubernetes or Docker Swarm. Currently, we strongly tend to Kubernetes but that decision will be made at the right time.

6.C. Scalability

By using a NoSQL database (horizontal scaling), react-lazy (reducing API calls), Kubernetes (deployment, auto-scaling, load-balancer, ...), redux (caching data etc.) we can significantly increase the scalability of our application. But we always have to keep in mind that "premature optimization is the root of all evil".

6.D. Customer Service

To relieve our human customer support, we will implement an internal chatbot to resolve basic customer inquiries/complaints. As we want to encourage real communication, want to stay authentic but as well want to have a reliable and free cost-efficient customer support, we decided to offer a simple button-based/deterministic chatbot (e.g. frequently asked questions, ...) which also offers an option for "human support". On this way we have a good trade-off between 'costs/employees/efficiency' <> 'authenticity/real communication'.

6.E.Wireframes

Following wireframes have been designed for the desktop version, but we plan to implement the website fully responsive (mobile first) and build the mobile apps according to the same design. Please be aware that we currently create/design our mobile application which will result in new or strongly modified wireframes.



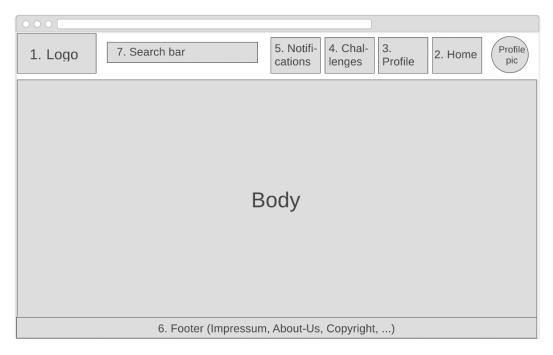


Figure 2: Basic Wireframe for all pages (Desktop)

The wireframe above (see Figure 2, p. 7) depicts how the headers and footers of all other pages are structured. The body represents the content of all other pages. The profile pic, home, profile, challenges and notifications button will be hidden when the user is not logged in.

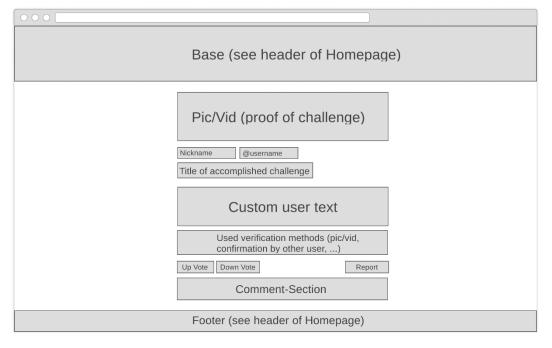


Figure 3: Timeline-Wireframe (Desktop)



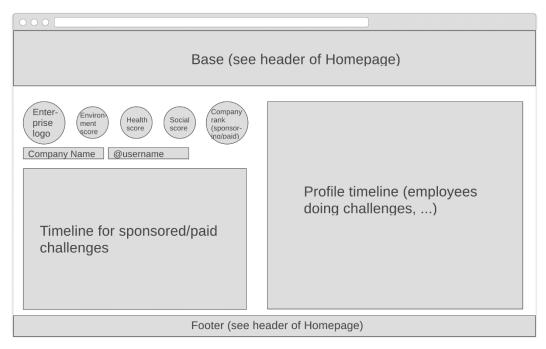


Figure 4: Company profile, Wireframe (Desktop)

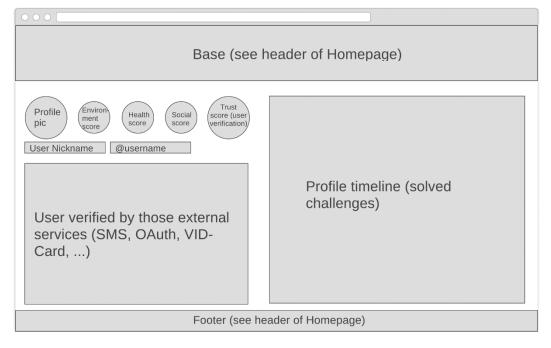


Figure 5: User-Profile, Wireframe (Desktop)



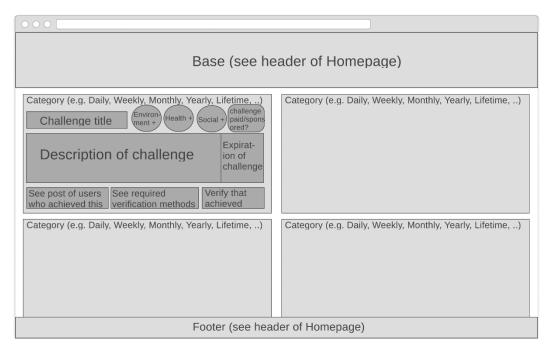


Figure 6: Challenges, Wireframe (Desktop)

6.F.Mockups

Mockups not included for brevity.

6.F.i. UI Flowcharts

UI Flows will be elaborated during the creation of our mockups and won't be included either.

7. Opportunity

The biggest problem in our society is that people mostly focus on themselves. Our environmental issues could be solved easier when people work together (e.g. everyone recycles, ...). Currently, people have the strong mindset that they can't make an impact which leads to ignoring those issues completely ("Why should I walk instead of driving, it won't make a difference."). With challenges people could be animated to work together.

As I travelled in the past a lot, I saw a lot of cultural differences. Northern countries e.g. tend to be less welcoming to strangers than southern countries (e.g. Saudi-Arabia's hospitality, Florida's openness, ...). Challenges which aim to encourage social-interaction (e.g. holding the door open for other people or approaching someone) could make everyone's day a little bit better, which could therefore also save lives (e.g. reducing depression-rates)!

Moreover, we could animate people to live healthier (e.g. "Eat at least one apple today."). Which is going to be another big issue especially in Northern countries (e.g. the increasing number of people which suffer from Diabetes). We don't want to present this social network as a solution for everything, but we are convinced that this app could have a huge impact on our everyday lives.

7.A. Interesting stats

This chapter focuses on providing stats and sources to confirm and support our statements/business model.



An increasing number of consumers checks company-reviews online beforehand and shares experiences in consumer forums.³

Consumers especially in industrial countries change their consuming behaviors. Simplicity, Authenticity and Individuality become increasingly important. Social reputation isn't related to the consumption amount anymore. According to Euromonitor this behavior will also play an essential role in emerging countries.³

Sustainable products will be more and more in demand. A rising number of consumers conditionally choose products/services on ethical questions.³

Facebook & Apple etc. profited by the phenomenon "Fear of missing out" (= "Fomo") as it has risen the consumption willingness worldwide. Currently, the opposite trend has an upturn: "Joy of missing out" (= "Jomo"). More people enjoy being offline, to choose how they spend their leisure time and to have a more fulfilling life.³

The percentage of elder people rises. According to "Consumer Trends Report of Euromonitor", products and services which do not focus on specific age groups will be more successful in future. All age groups have more commonalities as the majority thinks. Thus, enterprises who focus rather on similarities than of differences across different age groups might profit more than others.³

While the internet in general connects people, an increasing amount of family households molder. According to the Pew Research Center the number of single-households goes up, especially in industrial countries. Which will drastically influence people's consumption behavior. ³

Physical- and mind sport, awareness, transparency, "Hygge", We-Culture, "Good-Citizen", Social-Business, Flexitarian, Zero-Waste, Minimalism, Mindful-Economy, Glocalization [sic], Outsourcing of daily routines, Edutainment, Life-long learning, social-networks, "OMline" [sic]⁴, Playfulness, Connectivity, Creative-Economy and many more will play an important role in the future.⁵

Corporate-Social-Responsibility becomes increasingly interesting for consumers. 78 % of Austrians state that CSR is extremely important. Moreover, more and more Austrians expect that enterprises engage socially, especially related to environment-protection and their region. Consumers are convinced that enterprises should invest in CSR and profit from such measures. Social responsibility leads to a better company-reputation, which then leads to the company's success.⁶

Many trademarks have difficulties to market their products and services to Millennials.⁷

⁴ (Schuldt, 2019)

³ (Lange, 2019)

⁵ (Zukunftsinstitut, 2019)

⁶ (GfK Austria, 2018/2019)

⁷ (GfK Austria, 2017)



Future innovations will be led by four cornerstones: "Freedom", "Rewards", "Security" and "Wellbeing".⁷

CSR leads to more customer attention and more positive emotions towards products, trademarks and enterprises.⁷

Approximately 45 % of consumers feel guilty when they do something which harms the environment. About 32 % of consumers state that sustainability is really important, appr. 40 % think it's extremely important.⁸

About 41 % of the respondents are patrons/regular customers, while 68 % feel ignored by companies.8

Shawn Achor, who is Professor at Harvard discovered that 75 % of job success can be predicted by happiness as it leads to more intelligence, creativity, productivity, a longer life and more money.⁹

The top 5 regrets of the dying:10

- 1. "I wish I'd had the courage to live a life true to myself, not the life others expected of me."
- 2. "I wish I hadn't worked so hard."
- 3. "I wish I'd had the courage to express my feelings."
- 4. "I wish I had stayed in touch with my friends."
- 5. "I wish that I had let myself be happier."

Very happy people tend to be highly social, have stronger romantic and other social relationships, are more extroverted & agreeable and less neurotic. 11

According to a French survey the broad public thinks that regular ads are obsolete, while Sponsoring is considered State-of-the-Art.¹²

A brand's image has a more specific influence on the customers' perceptions of product and service quality while the company's reputation has a broader influence on perceptions of customer value and customer loyalty.¹³

Empirical evidence suggests that (1) a buyer's response to a service is consistent with his/her attitude toward the vendor's reputation, (2) the common factor underlying a company's reputation is primarily uni-dimensional, and (3) the effectiveness of a specific communications program can be enhanced by utilizing the company's reputation.¹⁴

8. Execution

After the first public version of the app, the major goal would be to establish a huge user base (also get companies to use the app) and to find some first enterprises which want to raffle some

^{8 (}Reichl, 2019)

⁹ (Achor, 2010)

¹⁰ (Steiner, 2012)

¹¹ (Diener & Seligman, 2002)

^{12 (}Walliser, 2013)

¹³ (Cretu & Roderick, 2007)

¹⁴ (Yoon, Guffey, & Kijewski, 1993)



vouchers/products/offers on 'Wavect'. The web application will be developed before the actual mobile application. The major goal in the whole development process (regarding UX and software design) is to make it as simple as it can be, but not simpler.

Success will be measured by the overall (active) user base and maybe even by first revenues (see 10. Financial plan, below) Nevertheless, the biggest challenge of all will be the process of creating new challenges (see 13. Challenges, p. 50, below) and verifying them (see Challenge verification, p. 52, below).

8.A. Project Management – Tools

To keep track about our progress, to know what we should and can improve as well as to make it as easy as possible for new team-members, we have introduced following software-tools which we use on a weekly or even daily basis. Additionally, our team needs to function and communicate well with each other, which is elaborated in a later chapter (see 9. Team and company, p. 19, below).

8.A.i. Trello

Although we want to encourage OKRs (see 9.C.i OKR – Objectives Key-Results, p. 21, below) we have also to process certain/specific tasks. Those tasks, suggestions for the future and even OKRs itself are managed on Trello. All boards are private and our Trello-Team has been invited explicitly. For those reasons we created and use following boards:

- "Wavect": General board, mostly unorganized. Contains specific tasks, information and suggestions about everything. This board has been created at the very beginning.
- "Wavect Marketing/Branding": Marketing tasks and suggestions.
- "Wavect OKRs": OKRs (see 9.C.i OKR Objectives Key-Results, p. 21, below) are managed in this board.
- "Wavect Software Development": Suggestions and tasks related to software development are organized there.
- "CURRENT_TASKS": This board explicitly only contains tasks which have to or should be done within a few weeks or at a maximum a month.
- "Wavect Law-related": Law related tasks and especially suggestions are listed there.

8.A.ii. Google Calendar

To keep track of current appointments we have created a Google Calendar.

8.A.iii. Skype

Our weekly as well as spontaneous meetings are held via Skype. An internal skype group has been created. Every meeting is followed by a feedback round to improve inner structures, effectiveness and team-bond.

8.A.iv. Slack

For a more effective and clearer communication we decided to use Slack instead of alternatives like WhatsApp, Mattermost etc. We created several channels (e.g. Software-Development, Marketing, Feedback, ...), connected GitHub, Dropbox, Trello, Polly (Survey-Tool) and our Google Calendar with Slack to keep everything as simple and powerful as possible. Our Feedback-Channel offers a Pollysurvey so that team-members could give anonymous feedback if necessary.

8.A.v. WhatsApp

For really important announcements or in case Slack does not work for whatever reason. WhatsApp-calls may also be used for weekly meetings in case there is a problem with Skype.



8.A.vi. GitHub

Although, we use a variety of developer tools to make our life's easier, we decided to only list the most important here, our Git and our private online repositories on GitHub as backup, version-control-system as well as collaborative tools. As usual, we use GitHub-Issues and use Branches to have even more control.

8.A.vii. Dropbox

To keep track over our documents, images or files in general we decided to use Dropbox. We had our files encrypted with VeraCrypt for a while, but removed it a week later as it is not worth the inconveniences at that point of time.

8.B. Project Structure Plan (PSP)

To keep track of our tasks we use Trello and the Github project manager (incl. issues). Our current project structure plan is listed below (see Figure 7, p. 14). On Trello we opened three different projects: General topics, Software Related and OKRs (see p. 21). We also already created an exemplary Github project which bundles all components into one repository (Backend, Frontend, Database, ...) which also uses a lot of developer tools, e.g.:

- Husky: Pre-commit-hook
- Jest: Test cases
- Tslint: Linter for TypeScript, increase code-quality
- Prettier: Make source code more legibleSnyk: Dependency vulnerability scanner
- Travis: Online test suite



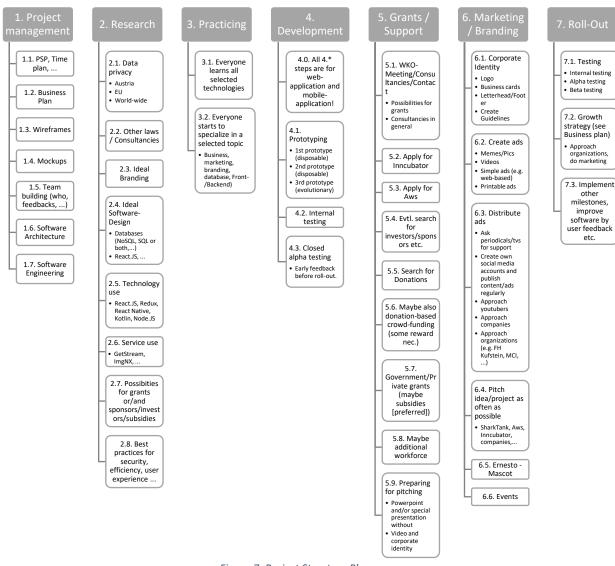


Figure 7: Project Structure Plan

As we use OKRs (see OKR – Objectives Key-Results, p. 21, below) to set goals every quarter, we don't have a regular time schedule. We have our goals for every time period and everyone tries to reach them which results in a highly adaptable and flexible time schedule.

8.B.i. Milestones

Following table represents current milestones. Already accomplished milestones are removed from this list.

- Surveys (esp. B2B, B2G)
- Interactive Mockups for all views created
- Finished 1st throw away prototype for mobile
- Finished 2nd throw away prototype for mobile
- Pitched idea at least once and found investor OR/AND got funding.
- Mobile Evolvement prototype is minimum functional
- Run effective marketing campaigns
- Mobile Evolvement prototype has all functions specified
- Wavect started to monetize (first customer)
- First prototype of web application
- Web-Application public



- Challenges are location- and user-dependent
- Using a more efficient challenge-creation procedure (e.g. Machine Learning, users, ...)
- Introduce machine-learning to improve challenge verification (e.g. pictures/videos)
- Enhance effectiveness of customer support (e.g. FAQ-chatbot, ...)
- Build platform/interface for organizations to book paid/sponsored challenges

8.B.ii. Software Requirements

Following software requirements are planned to include into the evolutionary prototype (see Prototyping, p. 15). Please note that some points won't be included into the throw-away prototypes and might be added incrementally to the evolutionary prototype.

UI	All pages are in grayscale. Only own content and interactions are colored for that user specifically.
	Also images and other media is shown in grayscale (e.g. via CSS-filters) although it is saved as colored media and is also shown colored for the owner.
	Include company mascot "Ernesto, the sarcastic snail" into the app. E.g. in customer support, app introduction etc.
Excluded	Our network explicitly provides no chat functionality to encourage user interaction in the real world.
features	Users can only post when solving a new challenge. Thus, no custom posts can be shared (e.g. selfies,).
	No ads and user data is gathered.
Quality	Users need to verify their identity during the registration process (e.g. multiple OAuth, SMS/Telegram,).
management	Solved challenges can be rated by other users (up-/down vote). Heavily downvoted posts will be hidden and evaluated manually.
	Solved challenges can be verified via several verification methods (important for sponsored challenges). E.g.: Confirmation by other user, Picture/Video as proof, etc.
Content	New challenges can be created by private users and companies (against fee) according to community standards. The might be released after automatic and manual check.
management	Generic challenges are reused after a certain amount of time.
	New challenges can be created automatically by a neuronal network and might be released after manual check.
Internationality	Challenges are location- and userdata-dependent. Different states or even facilities can result in different challenges as well as different user data (e.g. smoker, etc.).
	Relevant challenges and the whole UI has been translated into several languages (e.g. English, German, Italian, Spanish, Russian,)
B2B, B2G	Provide platform for enterprises to automatically sponsor challenges or create paid challenges.
	Offer platform for enterprises, NGOs and other organizations for creating local events in collaboration with Wavect.
	Create possibility to create enterprise/organization profiles.
Customer	Create chatbot (deterministic, button-/pattern-based) to resolve easy customer/user inquiries.
support	Establish human customer support and by using easy, efficient communication channels (messaging, calls,).
	Implement minimalistic user feedback form (e.g. only starrating, or even just thumb up/down,) to gather as most feedback as possible within the web-/mobile application as well as the customer support.
	Figure 8: Software Requirements - List

Figure 8: Software Requirements - List

8.B.iii. Prototyping

Before crafting any prototypes, we will create all necessary wireframes (see Wireframes, p. 6), mockups (see Mockups, p. 9) and graphics which are known to be needed. After that all (incl. the



throw-away prototypes) will be based on those mockups/wireframes to face and solve problems as early as possible. Additionally, we won't waste time by creating images or resources which we only need for throw-away prototypes.

All prototypes must use the same technologies to have a real learning effect. So, if we use Node.JS, React etc., then we need to use it for the throw-away prototypes as well. The only exclusion could be to use free instead of paid services (if there are any). Basically, we plan to create three prototypes to gather as many experiences as possible.

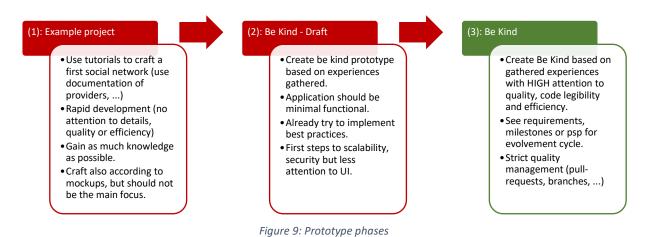
Legend

Throw-away prototypes

Prototype will be developed, but is disposed afterwards. Such prototypes will be developed rapidly with no/less attention to detail to learn of own errors as efficient as possible.

Evolutionary prototype

Prototype won't be disposed (at least it is not planned to) and is going to be improved continuously by adding new features, resolving bugs and details (GUI, ...). At the end this will be our fully functional social network.



8.C. Licenses

As we will use several technologies, we should know about the licenses itself to keep ourselves out of trouble. In the following list you might find a list of technologies which we will probably use during our development. This list might change over time (esp. which database we use).

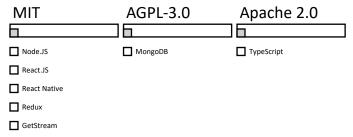


Figure 10: Licenses of potentially used technologies

8.D. Testing phase

Before publishing the software application(s) to the public (see Growth strategy, p. 17, below), we will test everything on an even smaller (and selected) user base.



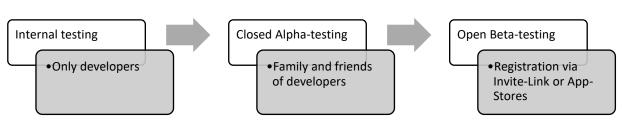


Figure 11: Testing phases

8.D.i. Open Beta-testing

Users can only register via an invite link which has to be provided by already registered users. The invite link is thought to keep the amount of profiles small. After the beta-testing phase the registration will be open according to our growth strategy (see Growth strategy, p. 17, below) when the user meets our profile verification requirements (see Profile verification, p. 53, below).

As Wavect is getting ready to get released to the public, we should start to market it. We decided to create some sort of countdown to make the release for the public more interesting and to boost people's desire to use the application. The countdown might be shown on our website or even the mobile application(s) as well as in published ads and events.

8.E.Growth strategy

To minimize risks and get early feedback from real users we will start after the testing phases with a small user base which will then grow consistently. To achieve that the social network will be available for following location ranges. The following growth plan has been set as we need to provide challenges (which don't interfere with their culture, ...) for all those countries.

- 1. FH Kufstein Tirol, Andreas Hofer-Straße, Kufstein, Austria (Not approached yet)
 - a. Also, some first events could be organized there (e.g. by SKVM undergraduates).
- 2. University Innsbruck and/or MCI (Not approached yet)
- 3. Innsbruck
- 4. Tirol
- 5. Austria
- 6. Germany, Switzerland, Austria, maybe Italy
- 7. Europe
- 8. Europe, North America (similar culture)
- 9. Europe, North America, Asia (big user base)
- 10. Europe, America, Asia
- 11. Europe, America, Asia, Australia
- 12. Europe, America, Asia, Australia, Africa
- 13. Worldwide

8.E.i. Market penetration

When starting with the first throw-away prototype we will create social media accounts on Facebook, Instagram and Snapchat where we post regularly about a "secret" project which might make the world a better place (= Wavect). Posts could show us working on the project itself (without telling what we do, keep it a secret), posting memes/quotes which suit our vision/goals and try to gain a huge user base before publishing or even announcing Wavect (e.g. posting a countdown of the release, see Open Beta-testing, p. 17, above). Additionally, we might consider starting with the first events alone or in cooperation with existing non-profit organizations [e.g. 4Ocean] (see 10. Financial plan, p. 22, below). Before, during and after that process we also might consider other marketing techniques (see 11.



Marketing, p. 27, below). First events like technical workshops are already organized and will be held in April 2019.

8.F.Intellectual property rights (IPR) strategy

As we want to scale globally the protection of our intellectual property is an important but challenging part. We will keep Wavect under lock and key until we developed the major part of the software. Before announcing Wavect we need to protect our trademark (concept, logo, name, etc.) and if possible, the software itself as good as possible even when not possible as stated before.

We are aware of the fact that such protection won't work retroactive. Therefore, we will protect some basic rights (e.g. trademark) as soon as possible to be able to operate (e.g. events, ...).

8.F.i. Concept Protection

Protecting an idea or concept is actually not possible, but despite that we can take several measures to be on the safe side. Following measures will be or have been taken.

- 1. Non-Disclosure-Agreements [NDA]
- 2. Cryptographic Signature
- 3. Registered Mail

All employees, cooperation or project partners (incl. all of us) have signed an NDA to protect the idea or/and have signed an obligation or similar agreement to their own organization which protects all sensitive information at least as well as our own NDA. An exemplary NDA has been attached to this business plan (see 17.CNon-Disclosure-Agreement, p. I).

In case our organization receives disciplinary-warning-letters or are even on trial for something, it would be a good idea to have the confirmation that we had the idea/concept already elaborated on a specific date. For that reason, we have signed the whole business plan with a cryptographically and regulatory valid signature which includes a timestamp to prove that we had the idea in best case before the other party. This procedure will be done regularly as it does not involve any cost.

Additionally, we will send the whole business plan via registered mail to ourselves. That mail won't be opened until we have to prove that we had the concept before. As sending such a registered mail involves some cost, we won't do that regularly as a cryptographic signature should be enough too.

8.F.ii. Trademark/Design Protection

As we want to organize events even before the application is production-ready, we will need to represent the company in some way. To be able to do that with less risks involved, we decided to register the trademark (e.g. logo) itself as soon as possible. This might involve some additional cost but is definitely worth the effort. Relevant design guidelines (e.g. grayscale and getting colored after interaction, see 11.AConcept, S. 27) as well as other protectable immaterial capital will be protected at some later point of time (e.g. when the software itself gets published).

As a combination of word and graphical trademarks is more difficult to protect according to our past law lecturer/a lawyer, we decided to protect our graphical logo and the textual trademark separately. This gives us more flexibility in defending our trademark.

Before using an official trademark, we will do a research to search for equal and especially similar trademarks which already exist. This will be done for both, the graphical as well as the textual trademark. The research should and will cover similar terms (similar textual name), branches (in which



branches are similar companies), translations (misunderstandings in other languages), phonetic similarities (e.g. expressions which are written the differently, but sound similarly: e.g. "akwa" <> "aqua"). The similarity search for our graphical representation will take more time is a lot harder, but will be done on a similar way. To search on several search engines for similar logos we might use an image recognition tool which uses deep learning.

8.F.iii. Protection of IPR

When growing or acting on a bigger scale we should outsource our intellectual/immaterial property to an independent collecting society. Therefore, our company will be separated into two separate independent enterprises. While the collecting society only manages intellectual property (patents, trademarks, ...) the operating enterprise rents the software as well as other immaterial capital (logo, ...) from the collecting society (white label). This procedure minimizes the risk that intellectual property has to be sold when the operating enterprise goes bankrupt. As this comes at some additional expenditures and is not relevant for a startup at all, we will do that at some later point of time.

9. Team and company

Our official team currently consists of the following:

9.A.i. Christof Jori

Role CTO, Chief Technology Officer

Range of duty Software Engineering/Development, Business Administration, Presentation and

Accounting

9.A.ii. Mariella Galneder

Role CMO, Chief Marketing Officer

Range of duty Graphic-/Communication Design, Marketing/Branding, Social-Media, Event-

Management, Corporate-Identity

9.A.iii. Reza Shokri, Bsc.

Role CIO, Chief Information Officer

Range of duty Software Architecture/Engineering & Development, Dev-Ops, Project

Management, Presentation

9.A.iv. Kevin Alfred Riedl, Bsc.

Role CEO, Chief Executive Officer

Range of duty Software Architecture/Engineering & Development, Presentation, Event-

Management, Management and Business Administration

9.A.v. Ing. Daniel E. Gosterxeier

Role CFO, Chief Financial Officer

Range of duty Usability/UX-Design, Presentation & Networking, Administration, has many

contacts and Accounting

As I worked on several projects with every single person in the team before, we have at least a basic idea on how to talk and work with each other. In our opinion the idea is only as good as it's team. Therefore, we have set up a collaborative agreement which gives every team member almost equal decision power. I believe that if everyone feels strongly attached to the company and believes in the idea, we will made it. Everything we can't do, can be learned. We already have a good theoretical knowledge in Business, Software-Development/Engineering, Marketing/Branding as well as communication.



Curriculums are attached (see Curriculums of team members, p. I).

9.B. Work-for-Equity

All company members have explicitly agreed to a cooperation contract, which determines how decisions are made and in general, how the collaboration is supposed to work. Our collaboration contract basically ensures/states that at maximum three of our team (see 9. Team and company, p. 19, above) will become regular associates while the rest of us becomes a typical undisclosed partner. Therefore, the more someone works in relation to other company members, the more equity he can expect.

At the time of incorporation, we will hold a meeting, no one will talk as we will exclusively communicate via hand-written text messages. In the beginning everyone will write down how much equity they think they deserve and why. Those hand-written notices will be handed through our group. Everyone will add his opinions on that request and might add an own suggestion. After the first round we will calculate the average of every suggestion and sum all of them up. In case the overall sum is below 100 % every share will be raised or reduced evenly if the sum is above 100 %. This whole procedure is repeated until a unanimous assent has been made. No one is allowed to speak during this process. The three team members with the highest shares will be regular company-members while the rest will be a typical undisclosed partner.

We agreed to this distribution to have a strong workforce and not having too many decision makers in our company which makes it hard to get any investors as well as making decisions in general. The general opinion amongst many experienced entrepreneurs is that a company should avoid having more than three decision makers and always an uneven distribution.

In case the equity-meeting has no unanimous assent, we might offer the possibility to make one or all typical undisclosed partners to atypical undisclosed partners which gives them more control about the company. In such a case we need to think about the following. As disclosed partners are not visible publicly, we will put them on our homepage as well as the real company-shares. This is done to prevent regular associates from making decisions for what they don't have the necessary share for (e.g. buying a property could require 70%). The company register states that the distribution of equity is e.g. 48,8%, 25,1%, 25,1% for our regular associates. But internally we have some atypical undisclosed partners which can change this distribution dramatically. Although, typical undisclosed partners cannot enforce decisions, atypical could depending on our company agreement.

9.C. Management

Another very important point is to ensure a good working atmosphere by keeping employees motivated, creative and happy. Many big companies see people as (replaceable) resources, what they basically are, but people want to feel that they are valuable for your enterprise. Leadership is a neverending learning process which is in our opinion almost more important than the idea itself ("As long you have a great team, your goal is not that important.").

We think it's necessary to care whether your employees are happy or not. When the performance of an employee is stagnating/decreasing, then good leaders should try to communicate with them on a personal level and support the employee if they can. Therefore, we decided to set following management techniques.



9.C.i. OKR – Objectives Key-Results

Google, Facebook, Intel, MyMüsli and many other successful enterprises use OKRs.¹⁵ Nevertheless, OKRs are easy to implement even for startups. OKR is simple an abbreviation for objective (what do we want to achieve?) and key-result (how do we know, when we reached a goal?). OKRs have many advantages and do not need a lot of maintenance, e.g.:

- More clarity
- Increased focus
- Better collaboration
- Autonomy (everyone can work autonomously on our shared goals)

To get the most out of it we want to ensure that we use OKRs correctly, by following some best practices:

- Goals need to be very ambitious.
- Key-Results are measurable (containing always at least one number)
- In best case, we reach only 70 % of our goals. Reaching 100 % means that the goals have been too easy.
- Bad/Worse results won't be punished.
- At maximum 5 goals with max 5 key-results each.
- OKRs will be set every quarter and can be changed during that period (e.g. by new knowledge).
- OKRs must be clear, transparent and public for every employee/associate.

Basically, there are three different types/approaches of OKRs.

Company-wide OKRs

3-5 goals and 3-5 key-results for the whole enterprise seem to be enough now and will give us the right direction for each quarter.

Team-/Department-wide OKRs

 As we are still a quite small team, we might not need team-wide OKRs as this just causes unnecessary bureaucracy.

Individual OKRs

Individual OKRs contradict the actual purpose of OKRs and have many downsides.
 Therefore, we won't use that approach.

9.C.ii. Weekly meetings and collaborative work

We decided to hold at least one weekly meeting to keep everyone up-to-date. Additionally, we work together on arbitrary problems (e.g. software engineering/development, economic decisions, ...) on a weekly basis via online tools like Skype or even personally. Currently, we have two weekly meetings (Mondays, Tuesdays) at 7 p.m. and work/learn together after the meeting itself.

Moreover, every 6 weeks every member of our team is supposed to answer following questions for one other team member (random selection):

- What is person X doing well? What should person X do more?
- What can person X improve? On what should person X work?
- For what do you appreciate person X?
- What do you expect from person X?

¹⁵ (Rotenberg, 2017)



9.C.iii. Task disclosure

As team members can work how much and on what they want as long as it suits our current OKRs (see 9.C.i OKR – Objectives Key-Results, p. 21, above), we need to keep track about who does what. Regardless of our project management (e.g. Trello) we should have a strong communication within our team. Thus, to keep our collaborative work transparent, every team member will inform other team members (see 9. Team and company, p. 19, above) about their tasks for the next 6 weeks.

9.C.iv. Anonymous complaints

Although we want to create/keep a humble, casual, supporting and motivating working atmosphere/firm culture, we will create a possibility to give leaders anonymous feedback. Submitted feedback will be visible by all employees (including the leaders) and can be up- or downvoted anonymously by everyone. This ensures an even more transparent company culture. Nevertheless, all submitted feedback will be scanned automatically for insults or other destructive content before publishing on the internal firm network.

9.C.v. Mantra

Every company needs a 'Why' (Why does a company exist?). Your enterprise is what your employees think it is. Therefore, we are convinced that having a short internal mantra for ourselves/our employees we encourage the identification with the company. Employees might be more motivated and comfortable. Additionally, it might strengthen the team-bound. Some exemplary mantras (we didn't select one yet):

- "Let's make the world a bit better."
- "Let's save the world for future generations."
- "Let's help, help each other."
- "Let's become a role model."

9.C.vi. Pessimist & Optimist

Some meetings/discussions and major decisions have at least one optimist as well as pessimist. The optimist only states possible positive outcomes, while the pessimist states possible outcomes which might risk the company's success as well as what the competition could do to harm our enterprise. This method is especially practically when people tend to have a similar mindset or have extremely different or very similar opinions as all points of views are considered and can be rationally evaluated.

10. Financial plan

Commercializing social networks was always a big challenge (see Facebook, Instagram, etc.). This chapter focuses on financial and economic point of views.

10.A. Revenue Streams

Possible ways to commercialize 'Wavect' could be the following. **Red** colored are revenue streams we explicitly exclude, **blue** colored ones are either optional for users or need discussion, and the **green** colored points might be used to commercialize the social network (see 17.A Financial Plan, p. I, below).

- 1. **Selling anonymized data**: E.g. Mofiler [= startup] or other procedures. Anonymous data or even personal data (contract according to DSGVO necessary) could be sold.
- 2. **Regular ads:** E.g. Admob/AdSense or own services. Do not show ads to keep quality of our application high. To get more popular fast and don't lose users too easy.
- 3. **Premium version:** E.g. subscription/one-time payment e.g. to hide ads (we don't plan to show ads), keep data private (we offer that option for free anyways) or any other possible premium feature. Currently, we don't even have something to offer for a premium version, BUT we don't



want to use this revenue stream anyway as each user is worth the same, no matter if they are paying for a service or not.

- 4. **Social media:** We could run social media channels (e.g. Instagram, YouTube, Facebook, Snapchat, ...) and repost accomplished challenges from users (if they want to) and could post our own ads which try to be sad/funny or similar. When having also a good follower count on those networks we could try to earn money by ads (YouTube ads, ...) etc.
- 5. Products (maybe with affiliate marketing too): (see 10.A.i Fan-Products, p. 23, below)
- 6. Sell Be-Kind: Maybe sell Be-Kind after becoming hyped.
- 7. **Donation:** As we are trying to make the world a better place, we could ask private persons, enterprises and governments for donations (cash or even services/products, ...).
- 8. Events: (see 10.A.ii Events, p. 23, below)
- 9. Paid challenges (see 10.A.iii Paid challenges, p. 23, below)
- 10. Sponsored challenges (see 10.A.iv Sponsored challenges, p. 24, below)
- 11. Commercial License (see 10.A.v Commercial/Business license, p. 24, below)

10.A.i. Fan-Products

After establishing a strong brand or during the process we could sell funny, motivating or just stating (e.g. "I did x", "I accomplished challenge y", "Wavect – User", "Wavect – reputation level", ...) products. E.g. sell products (t-shirts, cups, hats, funny gadgets, ...) to everyone. but some products should be exclusively sold to people who achieved a certain challenge, reached a certain reputation or are just active for a certain period. Maybe also affiliating people to use Wavect could be rewarded that way. Affiliate products will be distributed via external providers (e.g. SpreadShirt, ...).

10.A.ii. Events

Organize events with e.g. special challenges (maybe sponsored), being physically active or just having fun together (e.g. games which try to connect new people). Events have an entrance fee which might be payable online via Be-Kind or just at the entrance. Entrance price might be cheaper e.g. for people who achieved a certain challenge before. Small events like workshops at schools (e.g. we did in April 2019 a Workshop at the commercial academy in Innsbruck) might be completely free.

Moreover, cooperation's with other enterprises, NGOs or organizations (e.g. clubs, startups, ...) should be considered (e.g. 4Ocean, ...). We could organize with them several events which enhances our image and makes us more known. Revenue from events is completely unpredictable, but all events should at least cover our own costs associated with that event. Events can be attended by anyone. Possible events may be:

Gathering and recycling waste together: social-interaction, environment

Hiking or running together:

social-interaction, health

Go-Kart with random people:

social-interaction

Workshops (e.g. technical, economical, sport, ...) at schools:

social-interaction

Open-Houses with workshops at companies, clubs, ...:

social-interaction

10.A.iii. Paid challenges

Enterprises or/and users can upload own challenges. These need to follow community standards/guidelines (e.g. doing something good, not violating law, not creating direct revenue for paying company). E.g. "Post a picture before Pizza Hut on Instagram and open the door for 2 people". Such challenges can be but are not required to be sponsored too.

Also, non-commercial or public institutions (e.g. communes) could benefit from this service. As far as our research has shown many communes have a problem with cleaning up their village as they don't



have enough people or time to scour all routes. Thus, paid challenges could motivate inhabitants to help to clean their village. Nevertheless, they or companies could sponsor these challenges (see 10.A.iv Sponsored challenges, p. 24, below).

10.A.iii.1. Proposed, initial list prices

All types (environment, social, health) and durations (daily, weekly, monthly, yearly, lifetime) of challenges for following duration (= in that period users can see and accomplish the challenge):

Available for 2 weeks: 2,50 €
 Available for 1 month: 5 €
 Available for 2 months: 10 €

10.A.iv. Sponsored challenges

Challenges which are provided by Be-Kind or are paid challenges (e.g. voucher for next pizza after sharing with a homeless) can be sponsored with voucher codes (e.g. $10x50 \in Amazon$ voucher to raffle, ...), products (e.g. 3x TVs to raffle) which will be raffled between all people who accomplished and verified the challenge. Additionally, exclusive offers/rebates can be issued to all people who accomplished the challenge (raffling optional/not required here as no additional cost for companies). Considering the public sector (especially communes) it might be relevant or interesting to allow organizations to pay users with a provision (real money) after doing something good (e.g. cleaning certain routes in a village).

As we will require the companies to pay a fee to offer their products/offers/vouchers on our platform, we will need to establish a good price model. Considering that, our verification methods for such challenges should be as reliable as possible (see 13.D Challenge verification, p. 52). Additionally, we could also sponsor some challenges with a cheaper entrance-price for a Be-Kind-event (or even a normal event) or by giving rebates on our own products (e.g. affiliate/fan products).

While real products (e.g. TVs, consoles, cars, smartphones, ...) are already high costs for companies and is good for our own marketing/social network, this kind of sponsoring will/might be the cheapest for the companies itself. Sponsoring challenges with voucher codes (which hold a real value and don't simply make something cheaper) are cheaper than exclusive offers, but more expensive than sponsoring with real products. Sponsoring challenges with exclusive rebates (e.g. "Get 50% off your next purchase at {company X}.") are the most expensive for companies, as they don't have any direct costs here. Delivery costs of non-digital, raffled products should be taken over by the sponsor or might be prepared/available for collection at the sponsors premises.

10.A.iv.1. Proposed, initial list prices

All types (environment, social, health) and durations (daily, weekly, monthly, yearly, lifetime) of challenges for the duration of 1 month each:

- Sponsored with products, services or vouchers: 1-10 € depending on the amount of provided articles and the actual value.
- Sponsored with rebates or freebies: 5-25 € depending on the amount and the actual value.

10.A.v. Commercial/Business license

A business license allows to solve challenges as organization. Therefore, a business license can be considered as business representation of the organization and can accomplish challenges (e.g. employees, management, ...) as well as book e.g. paid challenges (see 10.A.iii Paid challenges, p. 23, above). Other users can see what challenges an organization sponsors, pays and has accomplished. A better working atmosphere, a better reputation and thus more effective employees might arise (see 12.B.ii B2B and B2G, p. 35, below). A business license is not necessary to book paid or sponsored



challenges. Additionally, NGOs, clubs, public institutions, politicians as well as celebrities (also influencers) need to have a business license instead of a private account as their market-representation/image is an essential part of their income.

10.A.v.1. Proposed, initial subscription fees

Costs dependent on the size of the organization itself or how popular/known the person actually is (e.g. politician, influencer, ...).

10.A.v.1.a. Free usage

An organization can request a free business license if following conditions apply.

- Less than 20 employees/members and...
- Less than 9k followers on Wavect, Instagram or other social-media and...
- Not a well-known celebrity, influencer or politician/political party (needs to be specified)

10.A.v.1.b. Starter-Package

An organization can choose between two price methods.

- Monthly cancellation possible, paying monthly in advance: 10 € / Month
- Yearly cancellation possible, paying monthly or yearly in advance: 5 € / Month

This price-model applies, if:

- Less than 75 employees/members and...
- Less than 19k followers on Wavect, Instagram or other social-media and...
- Not a well-known celebrity, politician or political party

10.A.v.1.c. Growth-Package

Following price-models are available for the growth-package.

- Monthly cancellation possible, paying monthly in advance: 20 € / Month
- Yearly cancellation possible, paying monthly or yearly in advance: 15 € / Month

This price-model applies, if:

- Less than 250 employees/members and...
- Less than 29k followers on Wavect, Instagram or other social-media and...
- Not a well-known celebrity or political party

10.A.v.1.d. Enterprise-Package

These-models are available for this package.

- Monthly cancellation possible, paying monthly in advance: 40 € / Month
- Yearly cancellation possible, paying monthly or yearly in advance: 30 € / Month

This price-model applies for all organizations and non-private people as long as they don't fit in one of the smaller packages. Additionally, the enterprise package may include a **free** paid challenge for the duration of 2 weeks (see 10.A.iii Paid challenges, p. 23, above).

10.B. Expenditures

Following expenses might arise the next few years (see 17.A Financial Plan, p. I, below). Debt capital will be avoided if possible.

10.B.i. On/After foundation

The foundation of a limited liability company (GmbH) causes considerable costs. Thus, the following might arise:

- Accounting: It is mandatory for limited liability companies in Austria to do Accounting.
- Foundation costs: The foundation of a multi-person GmbH is assumed to be about 2.400 € at the minimum. Approximately 2.000 € is caused by the foundation itself and appr. 400 € when



registering for the company-register (mandatory for GmbH). Those 400 € might be dropped as new founders seemingly don't have to pay that.

10.B.ii. Marketing

Our Marketing consists basically of Event-Management (see 10.B.iv Wages, p. 26, below), event-costs, advertising like Google AdWords, ... (see 11.C Advertising, p. 29, below) as well as the actual wages of our marketing experts.

10.B.iii. Travel expenses

Expenditures caused by traveling to fairs, competitions, for Networking, internal (e.g. Co-Working Space, personal meetings, ...) will be satisfied personally/privately in the beginning.

10.B.iv. Wages

Wages won't be paid as long the GmbH hasn't been found and enough revenues (see 10.A Revenue Streams, p. 22, above) are generated. Every associate/team-member currently works for equity (see 9.B Work-for-Equity, p. 20, above) which makes that less problematic. Following departments will be relevant for our business-model.

- Software-Architecture: A suiting software architecture needs to be established and maintained (see 6.A Software Architecture, p. 4, above). Without this procedure, no developer or software engineer knows what to do (comparable to facility architects and construction workers).
- Software-Engineering: Specific non- and functional software requirements (incl. UX, Usability, ...), concrete project structures etc. need to be planned/elaborated before and during the actual software development. Without software engineering a huge application like this will become unmaintainable, unreliable and inefficient.
- Software-Development: After everything has been or is being planned, the application can be programmed. This is a never-ending process as software needs to be maintained and extended with new features.
- Marketing/Branding: Planning and Elaborating marketing strategies, branding guidelines (e.g. letter-headers, social-media, ...) and being active on external social-media-channels (e.g. Facebook, LinkedIn, YouTube, Anchor.FM, ...) is an essential task (see 11. Marketing & Sales, p. 27, below).
- Event-Management/CSR: Event-Management and Corporate-Social-Responsibility are already executed on (e.g. organized already some small events).
- Management: Everything organizational, improving processes, networking, etc.

10.B.v. Hosting

Our software application needs to be hosted, what might cause costs according to the usage of our app.

10.B.vi. Operation Costs

Actual overhead costs (e.g. energy consumption on premises, ...)

10.B.vi.1. GetStream

GetStream is an API for building scalable news- and notification-feeds. They support TypeScript and Go (see 6.A.iii Backend Core, p. 5) and even provide React as well as React Native components for easier integration. As building an in-house solution would consume a lot of resources and 3.000.000 feed updates per month are completely free, we will take advantage of that offer (see 6.A Software Architecture, p. 4).¹⁶

¹⁶ (Stream.io Inc., 2018)



As we have to handle personal data, we have to ensure that non-anonymous data is saved general-data-protection-regulation (= GDPR) compliant. Therefore, we contacted GetStream about this issue directly and got an immediate reply. They offer a GDPR compliant data-protection-agreement (= DPA) which they can attach to enterprise plans (excluding pay-as-you-go). Additionally, it is possible to select the hosting option 'EU West AWS' to ensure that all data stays within the EU which greatly simplifies this issue.

10.B.vi.2. NoSQL Database – DynamoDB, AWS

Data hosted on GetStream (see 10.B.vi.1 GetStream, p. 26) will contain in majority primary keys which is then enriched with related data in the NoSQL database. As Amazon-Web-Services are quite cost-efficient and scalable, we decided to use this provider. Additionally, this service is free up to 25 GB and 200 Million operations per month without time limit.¹⁷

10.B.vi.3. File Hosting – Amazon S3, AWS

To host uploaded images and videos we will use the Amazon service 'Amazon S3'. This service for 12 months, up to 5 GB and up to 20.000 Get-Requests free.

11. Marketing & Sales

Getting a huge user base could be accomplished by approaching influencers (YouTube, Instagram, ...), bloggers, having (popular) social-media accounts ourselves (e.g. trying to get a big follower count even before the network is available to the public -> doing challenges ourselves and showing how fun it is / best of users [when they allow us to repost it]) or by using e.g. Google AdWords. Also, by approaching as many companies as possible is surely a good/fast way to generate a big user base (e.g. a company has an account, issues maybe voucher codes/products and achieves challenges with its employees, which could automatically lead to individual profiles of those employees and family members as well).

Moreover, we could interview people by asking if they would use a software like that when it exists. If they say yes, we could show them that it exists already or is near to get published. As already mentioned, we could have own social media channels on other networks where we repost content of other users (when they agree to it), where we post funny/sad ads or even just memes for ourselves etc. Additionally, we could ask enterprises if they want to participate in some challenges and then ask if they post it on the internet. By starting with the first events, we also could ask periodicals if they write an article about us.

11.A. Concept

Despite being a challenge-based social network and trying to make the world a better place, we also try to pursue a unique design concept. For our software applications we use only black, grayscale and white as colors. This will distinguish us from other websites and makes our design memorable.

We don't want to be known for a unique, but boring design concept. Therefore, each action which is done by a user is colored in its original color (but only for that specific user). Consequently, every user sees what he commented, liked and accomplished on the first sight (as it is colored). This could be also used in Marketing (e.g. "Bring color to the world.", "Change something.", ...).

Additionally, our social network will not offer any chat functionalities as we want to encourage social interaction in the real world. The only possibility to get in touch on the social network itself is through likes/dislikes on posts (see Anti-Mobbing Measures, p. 54, below), un-/following each other and

¹⁷ (Amazon-Web-Services, 2019)



commenting on each other's posts/accomplishments. Moreover, people cannot post random content. Every post is directly connected to an accomplished challenge. In addition to that, we want to establish an extraordinary brand (e.g. Ernesto, storytelling; see The face/representative, p. 28, below).

Furthermore, we won't use/print business cards, print flyers as advertisements nor we will use any other print media except it would not make any difference for the environment (like in periodicals as they are printed anyways). This measure helps us to stay more authentic.

Moreover, we want to take the fight against the massive amount of fake profiles (see Profile verification, p. 53, below).

11.B. Branding

Wavect might be best categorized as a brand-driven organization and aims to become a so-called 'webrand' which triggers positive emotions. The branding itself will be elaborated/managed by the management and won't be delegated to a future marketing department. Therefore, all decisions must not contradict with following guidelines or our vision/mission which are represented as our brand essence (see Vision, p. 3, above).

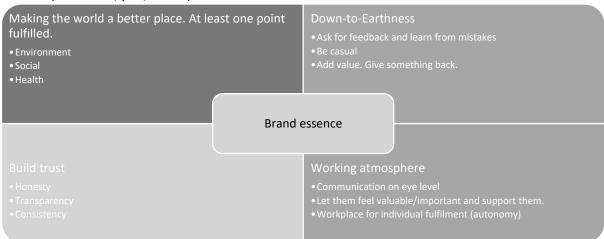


Figure 12: Brand essence - Matrix

For the success of our brand it is essential to never betray our brand essence(s) as we want to trigger positive emotions in people when they hear about us.

11.B.i. The face/representative

A strong brand has usually a concrete face (e.g. Steve Jobs for Apple, Mark Zuckerberg for Facebook, ...). But as real people will die and could behave against our vision, we decided to introduce an imaginary character called 'Ernesto', which is a cartoon snail. Ernesto is friendly, sarcastic, loves to eat and drink unhealthily and is such a cool/nice friend. Thus, Ernesto is more like a companion on a user's journey than an actual role-model and should convey easiness/humor to create an emotional connection between users and Wavect. Considering this, Ernesto is not perfect as no human is, his statements get more mature the more progressed the user is and he tries to convince users that they are not alone on their journey. Nevertheless, Ernesto might be considered a moral compass as he is convinced that life (even plants) is precious.

How, when and where users see Ernesto has not been set yet. He might be seen in advertisements, on our social network itself or only when people try to get in touch with us. If we decide to include Ernesto



in our software itself, then we should test during the Alpha/Beta phase (see Testing phase, p. 16, above) whether user like it and how they would improve it.

11.B.ii. Storytelling

Another important aspect will be to have an extraordinary story to tell. Which obstacles did we overcome or why did we pursue Wavect? When it comes to branding our social network, we will need to find (or even create?) a suiting story.

11.B.iii. Slogans

Following slogans should address different groups of people and might help to form our brand and reach new target groups.

- "The first real social network.": Shows USP and everyone knows what Wavect is about.
- "Bring color into the world.": Especially in relation to our design concept (grayscale).
- "What kind of human are you really?": Slightly provocative
- "We are the opposite of loneliness.": In German and English there seems to be no word for not being lonely.
- "Loneliness is deadlier than obesity.": Should wake up people referencing the tendency to isolating ourselves.
- "We are humans.": People are different, but we all are living beings.
- "No snowflake in an avalanche will ever feel being responsible.": Stanislaw Jerzy Lec, referencing our main concept (working together to solve todays problems).
- "Make the world a better place."

11.C. Advertising

Our business model is strongly dependent from our trademark. To reach new users or customers (B2B, B2G) we might use following means.

11.C.i. Print-Media

By organizing special events (e.g. cleaning a village, organizing a sport-event, ...) we hope to be mentioned in a periodical or similar print-media. Additionally, we will book ads in relevant print-media to become more known especially locally as we want to scale slowly (see 8.EGrowth strategy, p. 17, above).

11.C.ii. Online-Marketing

Influencer-Marketing, Google AdWords and Social-Media-Ads (e.g. Facebook, ...) have a lot of potential considering targeted marketing. We already have several online-presences (Facebook, LinkedIn, Instagram and Twitter) on which we are active on a daily basis (at least one post a day). Podcasts (Anchor.FM), an own blog (own homepage and reposting on known blog sites, e.g. Medium), Snapchat and YouTube will be used as soon as we have enough content and resources.

11.C.iii. Own CSR

To stay authentic, we need to do CSR on our own and solve challenges too as soon as our software has been available to the public. Moreover, CSR reaches new people and might mobilize new people to register on our platform.

11.C.iv. Event-Management

Our platform has a strong physical component: Events. Events are important for our own Marketing, Branding and CSR, e.g. to get in touch with other organizations for future Event-Sponsoring, paid/sponsored challenges and business accounts. Furthermore, especially bigger events should be profitable.



12. Market

This chapter focuses on the current and future market potential. Additionally, already existing competitors will be analyzed.

12.A. Business Model Canvas

The previously elaborated business model has been illustrated in the following figure (see Figure 13, p. 30, below).

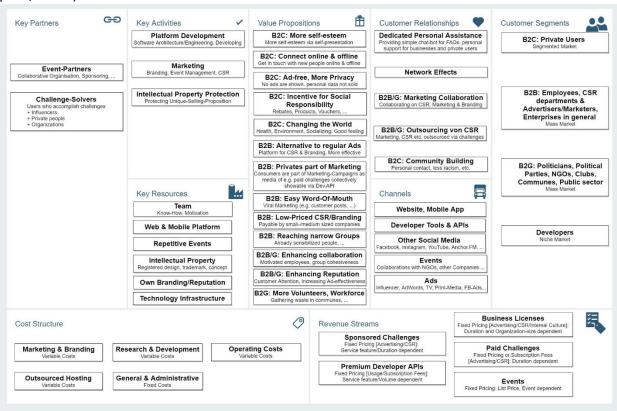


Figure 13: Business-Model-Canvas [attached]

12.A.i. Target audience

This chapter tries to define the main target audience of the challenge-based social network. But the use of our software applications or services is not limited to those groups. In general, we aim to address a segmented mass market.

1.A.i.1. B2C: Private Users

Thus, this chapter aims to define what our general user looks like. Private users use the software application itself (see 12.BValue Proposition Canvas, p. 34, below) without any costs. Private users may pay a fee for several (bigger) events (e.g. entry fee, meals, drinks, ...).

1.A.i.1.a. Demographics

- All Genders
- Aged 16-30
- Occupation
 - Students
 - Job-Seekers
 - Households/People with low income
 - Health/Social/Environmental sector
 - Office-jobs (need compensation)



1.A.i.1.b. Psychographics

- Concerned about at least one of the following:
 - Health
 - Environment
 - Social-Interaction
 - Saving money by vouchers/products
 - Improving own reputation
 - o Having fun, going on adventures, how to spend my leisure time
- Possible thoughts of people in our target groups:
 - Social networks and the digitalization have some major advantages, but most people don't know how to have a balance between their real-life and digital identity (e.g. too concerned about likes, etc.).
 - People act in a too isolated manner, are too unfriendly or don't see the upside in being open-minded and outgoing which might be a general side-effect of the digitalization.
 - As many people tend to be selfish, they don't think about any environmental issues and tend to segregate themselves.
 - o I need incentives to try something new (e.g. skydiving with one's best friend) or is just dissatisfied by how he/she spends his/her leisure time.
- Has used another social network before (e.g. Facebook, Instagram, ...) and knows the basics of using them.

1.A.i.1.c. Market segmentation

Considering the main target audience, we tend to segment our potential user base into following main, distinct groups:

- A People who want to improve the world (e.g. by protecting the environment, ...).
- B People who want to save money with vouchers or win products.
- C People who want to live healthier.
- D People who want to get in touch with new people.
- E People who want to improve their own reputation (e.g. for their CV).
- F People who want to have fun and experience adventures.

1.A.i.1.d. Personas

Personas are created as separate .PDF-documents to sustain legibility. In the following list you will find the name of the persona and the target group (in bold) they might belong to (see Market segmentation, above).

- 1. Andreas Weichselbaumer
 - a. Is concerned about the environment and wants to have two children. As a good father he might care about making the world a better place. (A, above)

2. Markus Schmidt

a. Markus is an open-minded person, who likes to learn/try something new. He also thinks about founding an own company and wants to get a well-paid job. As Markus is concerned about saving money, living healthy (because of his hobbies and personal goals) and getting a good job, we could put him into three target groups. Considering, the profile we decided for the following target group. **(E, above)**

3. Chiara Unterweger

a. As she wants to move out from home and is working as a vendor she is mostly concerned about the unfriendly behavior of some customers and tries to save as much money as possible. Chiara could be put into two target groups, but we decided to put her into following group (B, above).



1.A.i.1.e. Requirements/Conclusions

Our challenge-based should make the world a better place in general and should provide the possibility to save some money by having some sponsored challenges (vouchers, products, offers). Therefore, our software applications should encourage the social interaction in the real world, should help to protect our environment and give some guidance on how to live healthier. Also challenges to provide help for current incidents (e.g. for an earthquake -> "Donate at least \$ 2.", etc.) could be issued.

1.A.i.2. B2B: Enterprises & commercial institutions

Businesses may use our software application for their own business and are charged based on their company size. Moreover, commercial organizations may book paid challenges (see 10.A.iii Paid challenges, p. 23, above) or sponsor existing ones (see 10.A.iv Sponsored challenges, p. 24, above). Businesses can be of any size and our services are as relevant for small businesses as for huge corporations. As this market segment is considered undifferentiated no further elaboration has been done.

1.A.i.3. B2G: NGOs & the public sector

NGOs, organizations in the public sector, e.g. communes, etc. use our software application quite similar to commercial enterprises (see 1.A.i.2 B2B: Enterprises & commercial institutions, p. 32, above). Although this market segment has other interests in using our services as businesses, we can address/support them on a similar way (see 12.A.iiDistribution Channels, p. 32, below).

1.A.i.4. Developers

Developers could use our REST API or GraphQL-Endpoint to build own applications.

12.A.ii. Distribution Channels

As we offer in majority digital services, we can separate our distribution channels as follows.

12.A.ii.1. Mobile application

Our mobile application will be distributed via platform-specific app stores, our homepage as well as via social-media (e.g. Facebook, LinkedIn, ...). Even events aim to convert new users as challenges are solved collectively.

12.A.ii.2. Booking paid/sponsored challenges

In the beginning we will contact organizations personally to let them know about our services. As we organize a lot of events (e.g. in collaboration with enterprises, sponsors, ...) we will have a lot of contact opportunities. Additionally, we all have already several contacts to a lot of companies and organizations which makes the start a lot easier. Nevertheless, we will create an interface for organizations to book paid challenges or sponsor challenges completely autonomously.

12.A.ii.3. Events

Events will be mostly organized with other organizations, which makes it less complicated to advertise them. We will use Facebook, our homepage as well as our mobile application to let people know about relevant and interesting Wavect-events.

12.A.iii. Customer relationships

On what basis do we communicate with our customers/users?

12.A.iii.1. Marketing/Branding/CSR collaboration

In collaboration with B2B and B2G-Organizations events are organized or/and services (e.g. business accounts, paid/sponsored challenges) are offered to enhance one's image.

12.A.iii.2. Dedicated Personal Support/Assistance

As we want to encourage social interaction and to stay authentic, we will have to establish a dedicated personal support. Despite that we will add a simple FAQ (= Frequently Asked Questions) chatbot before



the actual personal support to relieve our personal support and decrease related expenses. Our customer support will be available for all private (= B2C) and business (= B2B, B2G) users.

12.A.iii.3. Community-Building

Considering consumers, we try to connect the world similarly as regular social networks do. As opposed to other platforms we want to encourage the social interaction in the real/physical world by having a strong physical component, our events. This helps e.g. to strengthen existing teams (e.g. employees, ...) and to enlighten everyone's day.

12.A.iii.4. Network effects

The old-fashioned subscription-functionality (e.g. Instagram) interconnects a huge amount of accounts and creates a big network. Accomplished challenges can be shared on other platforms (e.g. WhatsApp, other social networks, etc.) to amplify this effect. Network effects are closely related to building a community (see Community-Building, p. 33, above) especially considering events as people will get in touch with each other.

12.A.iv. Key-Partners

Please note that an organization or user can refer to multiple categories.

12.A.iv.1. Event-Partner

Events of all sizes are organized with event-partners (Sponsoring, Event-Management, Promoting, ...). Smaller events (e.g. Workshops in schools (already done), gathering waste together, ...) might be organized alone. Event-Partner might be NGOs, institutions in the public sector as well as more known people (e.g. politicians, influencer, experts, ...).

12.A.iv.2. Challenge-Solver

Challenge-Solver are simply users who solve challenges within our app. Every accomplished challenge supports word-of-mouth, reaches new people, increases the value of our paid/sponsored challenges and helps to convince new people to register on our platform. Basically, everyone can solve challenges, B2C, B2B as well as B2G. Nevertheless, B2B and B2G might need a business license if they are a certain size.

12.A.iv.3. Private & Business User

Registered users in general have a positive influence on our platform. Active users more than passive users as they increase the presence of our platform and increase the relevance of our platform as well as make our app more attractive for other user groups and customers (B2B, B2G). Also, Influencers itself are an important factor here.

12.A.iv.4. Customers of paid/sponsored challenges

We are not an NGO. Thus, our paying customers are particularly relevant for our company's success. Enterprises, NGOs, Communes and other organizations can book CSR/Marketing/Branding similar to regular online ads.

12.A.v. Key-Activities

The whole enterprise can be reduced to following core activities.

12.A.v.1. Software-Development/-engineering/-architecture

The whole concept is based on our software application. For brevity please see relevant chapters (see 6. Implementation, p. 4, above).

12.A.v.2. Marketing/Branding/CSR

Our services only sell if we have a relevant user base as well as a good reputation by ourselves. For brevity please see relevant chapters (see 11. Marketing & Sales, p. 27, above).



12.A.v.3. Registration of Intellectual Property

We will live and go bankrupt because of our trademark. Therefore, the actual registration of our intellectual property is an important and unavoidable task (see 8.FIntellectual property rights (IPR) strategy, p. 18, above).

12.A.vi. Key-Resources

Our key resources are based on our key activities (see 12.A.v Key-Activities, p. 33, above), which might let you recognize some parallels.

12.A.vi.1. Web- & Mobile-Platform

Without our software application the whole business model could not work. Additionally, also our technology infrastructure/stack can be considered a key resource as our software would not work properly or at all without it (see 6. Implementation, p. 4, above).

12.A.vi.2. Regular events

Although the organization of events is considered as key-activity (see Marketing/Branding/CSR, p. 33, above), events itself are an essential part of our business model and are listed as key-resources.

12.A.vi.3. Working capital, Team

Our concept is heavily dependent on working capital (e.g. Marketing, Software-Development, ...). As all team-members currently work for equity (see 9.B Work-for-Equity, p. 20, above) we don't have those direct costs at the moment. Obviously, we have to include them into our calculations.

12.A.vi.4. Intellectual Property

The registration of intellectual property is definitely a key-activity (see Registration of Intellectual Property, p. 34, above) as we strongly depend on our trademark. Thus, our intellectual property itself is considered a key-resource.

12.B. Value Proposition Canvas

To evaluate why users would use our social network (see Figure 14, p. 34, below) and why organizations would pay for our services, we elaborated two value-proposition-canvas.

12.B.i. B2C

The next figure (see Figure 14, p. 34, below) explains why private users want to use the software and might attend some of our events.

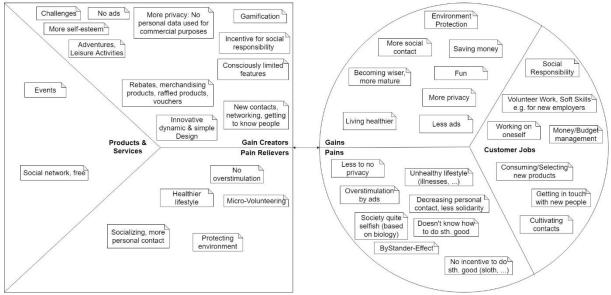


Figure 14: Value-Proposition-Canvas for B2C, undifferentiated/segmented market [attached]



You will find a more detailed description of the figure above in the following list.

- Online as well as offline interaction. Our platform offers no chat functionality and does not allow to post arbitrary content. By several events we aim to increase social interaction in the physical world and want to strengthen the shared identity. Nevertheless, user can interact online via comments and post ratings (e.g. up-/downvotes [downvotes only visible for content creator and us, to evaluate the relevance and authenticity of the published content.
- No regular ads, what allows for more privacy. As challenges might be location- (e.g. university, culture, ...) or/and user-dependent (e.g. smoker, ...) or completely generic, we don't have to gather a lot of data and can offer users the **option** to receive more relevant challenges by adding some private data to their profile. GDPR (= DSGVO) compliance already evaluated by several consultancies. Those challenges can be sponsored or paid by organizations which makes it possible to execute targeted Corporate-Social-Responsibility as well as Marketing in general. Thus, data will be exclusively used for querying new challenges.
- Many incentives to accomplish challenges, e.g. rebates, raffled products/services and vouchers (raffles might need to implement an age restriction) etc. We also thought about distributing provisions from sponsored challenges (e.g. enterprises pay x € y € service fee = z € to distribute to users), but this feature won't be implemented the first few years. Moreover, the user presents him-/herself on our platform, which is actually the biggest incentive for today's social networks. Additionally, users can attach their profile (similar to LinkedIn) as reference for volunteer work (micro-social-responsibility) to their CV.
- Furthermore, our platform increases self-esteem, conveys a shared identity (collaborations, collective thinking) and also does something "good" (related to the current culture and user profile) which is enough for some target groups (see 1.A.i.1 B2C: Private Users, p. 30, above).
- Although, we have listed many incentives for accomplishing challenges, the most important is fun and adventure. The mass market won't be reached with above's techniques. Thus, we explicitly aim to provide fun, difficult, exciting, moving and adventurous challenges to also reach non-sensitive groups.

12.B.ii. B2B and B2G

The following canvas (see Figure 15, p. 35, below) shows the value proposition for the Business-to-Business and Business-to-Government (public sector in general) market (how do organizations profit from our services?).

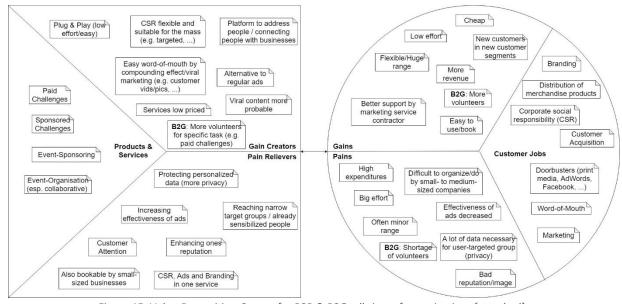


Figure 15: Value-Proposition-Canvas for B2B & B2G, all sizes of organizations [attached]



Relevant information from the canvas above has been explained in the following list.

- **B2B**: Alternative to regular ads. Platform for CSR & Branding. CSR supported sponsoring (more attention from consumers). By doing targeted CSR enterprises can reach new markets.
- **B2B**: Easy word-of-mouth and viral marketing. Accomplished challenges can be very emotional or amazing to watch (e.g. skydiving) and could be shared virally on other social-media.
- B2B: Affordable CSR/Branding as bookable similarly to regular ads. Thus, this might be also interesting for small- and medium sized companies as they usually cannot afford any CSR or Branding measures.
- **B2B & B2G**: Own reputation can be enhanced. By booking paid- or sponsoring challenges organizations show that they are committed socio-politically.
- **B2B**: Already sensitive people (e.g. environmentalist, ...) are a market which grows significantly every year and are hard to convince for their products. By using our social network (e.g. solving challenges as company, sponsoring or paying challenges) they might be easier to convert.
- B2B & B2G: Enterprises and other organizations can register on our platform (business-license) and do company-internal CSR. Employees then accomplish challenges in the name of the company/organization itself which can enhance the working atmosphere, improve the organization's reputation and might be also a good possibility to do team-building.
- **B2B**: Our events give enterprises also the possibility to do further Marketing/Branding/CSR, as participants will solve collective challenges. Old-fashioned methods like sponsoring & co. are possible and desired too.
- B2G: Especially communes or comparable organizations can profit especially from paid challenges. Tasks which require volunteers or tasks for what resources are missing (e.g. employees) could be booked by the organization (they need to comply to one of our three topics: environment, health, social interaction). E.g. communes could publish a challenge to clean specific woodlands or hiking routes. Care-homes, the community-service agency in general and other similar organizations (e.g. NGOs, ...) can profit from paid challenges to overcome the shortage of volunteers.
- **B2G**: Political parties or politicians often represent specialized/narrow interests and can profit especially during election periods to enhance their own reputation. Politicians are considered business users too and are charged according to their position.
- **B2G**: NGOs, clubs and other public institutions can become more attractive for potential members by solving challenges as organization. Obviously, those organizations are also considered business-users and have to pay a fee according to their size (e.g. small clubs might be free, big NGOs need to pay x €).

12.C. Environment Analysis

Following figure shows relevant actors (see Figure 16, S. 37, below). Relevant actors are:

• Stakeholders: Several external stakeholders, who have different interests than us.

Politics: Which governmental organizations might have an influence on decisions.

Media: Relevant media and press which might be used to share our content and

to mobilize more people.

Competitors: What are major competitors? Please note that all of our competitors have

a completely different concept in almost all belongings. Non web-based

competitors haven't been encountered.

Provider: Which services might be used for hosting or maintaining services.

Business Users: Not exhaustive list of organizations which have to use a Business account.



Private Users: Major private users. (see 12.A.iTarget audience, p. 30)?

Internal: Internal organization (sooner or later).

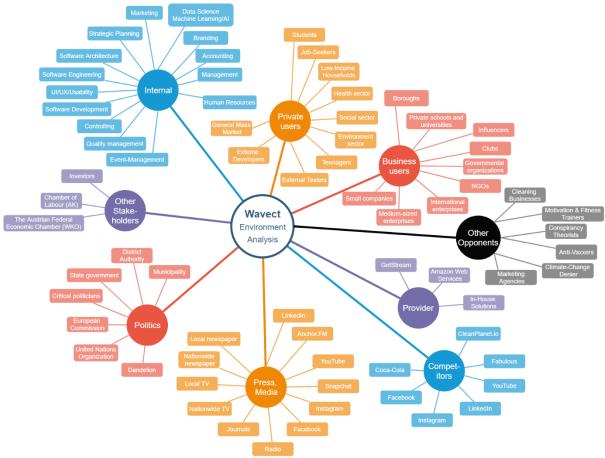


Figure 16: Environment Analysis [attached]

12.D. Market research

Two representative surveys will be made, one focuses on private users (see 12.D.i Survey: B2C, p. 37, below) while the other examines companies and other organizations (see 12.D.ii Survey: B2B/B2G, p. 38, below).

12.D.i. Survey: B2C

This survey has been done in End of April 2019. Following questions have been answered and evaluated.

- 1. Would you use an app which raffles products, services, vouchers and rebates to people who did something "good" or surpassed oneself (e.g. skydiving)?
- 2. Users don't only win products etc. with a bit of luck but also receive points for their profile by accomplishing challenges (e.g. "Gather 5 cigarette stubs and recycle them.", "Hold the door open for someone.", "Go bungee-jumping with your best friend."). These points are an indicator for what is truly important to you: social interaction, protecting the environment or/and your own health. Would you use an application which allows you to do micro-volunteer work which allows you to attach your profile/points to future CVs or/and applications?
- 3. Are you annoyed by regular ads (e.g. Facebook, YouTube, ...) or/and do you want to have more control about your data/data privacy?



- 4. Do people post too much of useless and pointless content on regular social-media (e.g. Instagram, Facebook, ...)? Would you prefer more valuable posts?
- 5. Your friends can see what challenges you have accomplished (as long as you want to). Would you be interested in videos/pictures of other people when they do something "good", e.g. when they accomplish something sporty, post something moving (e.g. sad, funny, etc.) or try to protect the environment (e.g. cleaning a beach with friends)?
- 6. Do you think it is a good thing, when businesses and other organizations (e.g. NGOs, political parties, ...) can sponsor or pay such challenges to enhance their own reputation? This could help them to show that they are committed to some topics (environment, social interaction, health).

The graph (see Figure 17, p. 38, below) depicts the results of this survey. Labels (e.g. 1, 2, ...) are related to the list above.

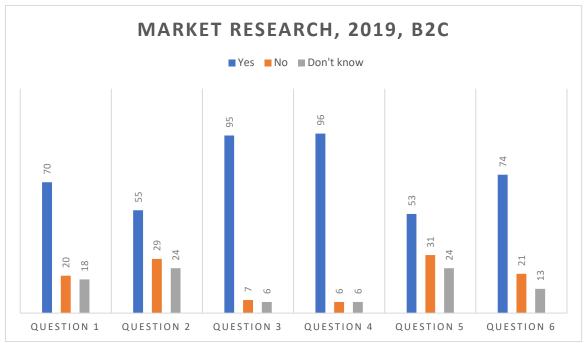


Figure 17: Market research, B2C survey

12.D.ii. Survey: B2B/B2G

Unfortunately, not enough data is available yet.

12.E. Competitors – Direct comparison

Considering my past researches, we haven't found any direct competitors as most social networking sites focus on distributing information (pictures, videos, ...). Nevertheless, popular social networks like Facebook, Instagram, Snapchat, etc. could be considered as competitors, but 'Wavect' won't allow posting random user content (e.g. pictures from holidays, etc.) and tries to encourage user interaction in the real world instead of connecting people on the website itself. Please be aware that for brevity this table does not list all relevant (indirect) competitors.

	Wavect	Fabulous	Facebook, Instagram, LinkedIn,
	Making the world a better	Motivating people to	Connecting people on the
Superior goal	place by encouraging	have a healthier	Internet and distributing
	people to protect the	lifestyle.	information (news, sharing



	and incompany cutting		nonconal data with full-rule
	environment, getting social in the real life and living healthier.		personal data with friends,).
Main strategy	see 10. Financial plan, above	Premium version, maybe data gathering	Gathering user data, showing ads,
Strengths	New social networking conceptVery good image because of its superior goal	Big user baseGood UX	Big user baseA lot of featuresEfficient and quite secure
Weaknesses	 A lot of (indirect) competition on the market Challenges need to be written Sponsors need to be found otherwise we don't have sponsored challenges 	 Only improving your own lifestyle Just a regular app. 	 Reputation regarding privacy/ads etc. not that good Awareness of negative side-effects of spending too much time on social media sites increased. It's considered something good not using those social networks.
Main differences	 Users cannot post random content and can't write private messages. Social network is mainly some sort of motivational network to do good things in the real world. 	 Not a social network, but challenges solvable. Only for a healthier lifestyle. 	 User can post random content (pics, vids, status,) Social network aims to connect people online and is more for logging past events.

Table 1: Competition Comparison

12.F. Market Assessment

Another important tool to estimate the potential of our services are TAM (see 12.F.i Total-Addressable-Market (TAM), p. 40, below), SAM (see 12.F.ii Serviceable-Addressable-Market / Served-Available-Market (SAM), p. 41, below), SOM (see 12.F.iii Serviceable-Obtainable-Market (SOM), p. 42, below). Please note that all formulas have been chosen according to our research and might not be the ideal or most accurate way to calculate those indices. As we don't have any direct competitors (see 12.G Blue Ocean Shift, p. 43, below) we decided to do the Market Assessment in comparison to other/regular social networks. Following figure (see Figure 18, p. 40, below) references to customers as B2B/B2G customers, which means the actual paying user. Please be aware that all assumptions have been made for the current stage (= first one or two years), which means the market analysis is far more pessimistic than it might be.¹⁸

¹⁸ (Clifford, 2019) as well as non-public slides of INNC (= "Inncubator" program, Innsbruck, 2019)



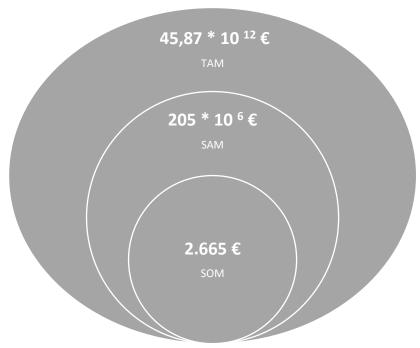


Figure 18: Market Assessment

12.F.i. Total-Addressable-Market (TAM)

This part refers to the total market demand for a product or service, thus it equals to the maximum amount of revenue a business can possibly generate in a specific market if there are no competitors.

TAM = {TOTAL NUMBER OF CUSTOMERS IN A MARKET} * {AVERAGE ANNUAL REVENUE OF A CUSTOMER}

Converting this value to € we get about 45,87*10¹² € on 07.05.2019 15:33 UTC.

~ 45,87*10¹²€

12.F.i.1.Total customers

In 2018 appr. 3.196 billion people used social media which has been a growth from about 13 % in comparison to 2017. Moreover, appr. 11 people join a social-media site every second. About 70 % of people use social media at least in North America, but the social-media penetration is still at 42 % globally. Appr. 2:15 hours are spent by people around the world daily on social-media which is more than people watch TV. Furthermore, about 95% of all small businesses plan to increase their marketing budgets in 2019 while about 3 of 4 small businesses already invest in social-media marketing. This trend indicates that the actual Total-Addressable-Market can still grow. We didn't find any trustworthy data about the total amount of customers. Nevertheless, as we have the average annual revenue as well as the TAM itself (= \$51.3 billion in 2018) we can estimate the actual number of customers assuming their ad-budgets have the same size. 19, 20

{TOTAL NUMBER OF CUSTOMERS IN A MARKET} = TAM / {AVERAGE ANNUAL REVENUE OF A CUSTOMER}

$$2,975*10^{12}$$
 CUSTOMERS = \$51,3*10¹² / \$17.24

¹⁹ (Cooper, 2018), (Kemp, 2018)

²⁰ (Pickard-Whitehead, 2019)



~ 2,975*10¹² customers

12.F.i.2.Average annual Revenue per customer

Social-Media-Ad-Budgets of an organizations Marketing-budget have been about 9.8 % in 2018, 13 % in 2019 and are predicted to grow up to 18.5 % within the next 5 years. Additionally, advertising on videos grew appr. 130 % in 2017 compared to 2016. Therefore, average annual revenue might still go up over the next few years. These trends also indicate an increasing TAM. The actual revenue has been around \$51.3 billion in 2018 which is appr. \$17.24 per user. On 07.05.2019, 14:55 UTC those \$17.24 corresponded to 15,41 € per user. It is predicted that this revenue grows about 10,5 % annually. It is estimated that global mobile ad spending might reach \$247.4 billion by 2020. 19, 21

~ 15,41 €

12.F.ii. Serviceable-Addressable-Market / Served-Available-Market (SAM)

This market share refers to that part of TAM (see 12.F.i Total-Addressable-Market (TAM), p. 40, above) which can be served with our current business model. This market share excludes customer segments which might have (slightly) other needs and thus won't be served from the very beginning. As we plan to scale incrementally to avoid several problems in critical phases, we will be only available in Austria in the very beginning (see 8.E Growth strategy, p. 17, above). Please be aware that we plan to scale outside of Austria and if possible, even globally. Furthermore, we might not meet the requirements and needs of the B2G market (see 12.B.ii B2B and B2G, p. 35, above) yet as they profit differently from our services than enterprises.

SAM = {TOTAL NUMBER OF GOOD-FIT CUSTOMERS IN A MARKET} * {AVERAGE ANNUAL REVENUE OF A CUSTOMER}

205*10⁶ € = 529.693 CUSTOMERS * 387,02 €

~ 205*10⁶€

12.F.ii.1. Total customers

As of 2018 the WKO states that there have been 529.693 companies active in Austria. Almost half of those companies are competing in crafts and trades which means they are in majority in the B2C market. Furthermore, about 99,6 % of all active enterprises in Austria are either small- or medium-sized according to SME-Research Austria. As mentioned before, we may exclude the B2G market here.^{22, 23}

~ 529.693 customers

12.F.ii.2. Average annual Revenue per customer

It is predicted that Austrian companies will invest appr. 205 Million € into online-ads in 2019. As 2019 is a more accurate value than any in 2018, we will use it for further calculations. We haven't found any average annual revenue per customer/marketer, which makes a backwards calculation necessary.²⁴

{AVERAGE ANNUAL REVENUE OF A CUSTOMER} = SAM / {TOTAL NUMBER OF GOOD-FIT CUSTOMERS IN A MARKET}

 $387,02 € = 205*10^6 € / 529.693$ CUSTOMERS

²¹ (Aleksandra, 2018)

²² (Wirtschaftskammer Österreich, 2018)

²³ (KMU Forschung Austria - Austrian Institute for SME Research, 2018)

²⁴ (Statista, 2019)



12.F.iii. Serviceable-Obtainable-Market (SOM)

This part refers to that part of the SAM market (see 12.F.ii Serviceable-Addressable-Market / Served-Available-Market (SAM), p. 41, above) which is obtainable/servable from the very beginning/the first few years. Resources, other capacities, current competition as well as who is reachable with current Marketing or our personal networks influences this share. All assumptions here are bound to the prerequisite that we already have a working prototype and a moderate number of active users. Please be aware that all assumptions made here are completely dependent on SAM (12.F.ii Serviceable-Addressable-Market / Served-Available-Market (SAM), p. 41, above) and TAM (12.F.i Total-Addressable-Market (TAM), p. 40, above), which makes it even more inaccurate as they are just assumptions too.

SOM = {TOTAL NUMBER OF SERVABLE CUSTOMERS IN A MARKET} * {AVERAGE ANNUAL REVENUE OF A CUSTOMER}

2.665 € = 533 CUSTOMERS * 5 €

~ 2.665 **€**

12.F.iii.1. Total customers

While we are restricted to Austria in the very beginning because of several legal aspects and to scale more securely, we also have to keep in mind that we have to reach our potential customers via Marketing or our personal networks. Moreover, we should not forget that we have to reach a bigger user base to become more relevant for an increasing amount of organizations. In 2018/2019 there have been about 53.311 active WKO-Members in Tirol as these can be reached more probable in the very beginning. Additionally, we estimate that appr. 99 % of those members are not relevant for our services at the very beginning either because they don't have a trademark at all, are not really active, are just too conservative to try something new or especially cannot be reached via our personal network or/and Marketing. Please be aware that this assumption might be valid for the first one or two years and should grow after that via more efficient Marketing, a bigger reach/network as well as returning customers etc.²⁵

~ 533 CUSTOMERS = 53.311 ACTIVE WKO-MEMBERS IN TIROL / 100

~ 533 customers

12.F.iii.2. Average annual Revenue per customer

Although, Austria consists of small- to medium-sized companies in majority, we might be more relevant for smaller and local enterprises as they can directly profit from our services even when not that many users are on our platform. The marketing budget of smaller and medium-sized companies is more limited, which means that the average annual revenue per customer might be significantly reduced. Moreover, it is important to state that companies won't spend a huge amount of their Marketing-Budget on our platform in the first few years, which might further reduce the average, annual revenue. Considering, that organizations might just try our services the first few years we assume here that at maximum 5 € per customer (see 10.A Revenue Streams, p. 22, above) will be spent on our platform to keep this market analysis as pessimistic as possible. Please keep in mind that this assumption should

²⁵ (Wirtschaftskammer Österreich, 2018)



be only valid for the first one or two years and may increase after/during that period as we grow our user base, get more relevant, reach more companies etc.²³

~5€

12.G. Blue Ocean Shift

As there are hundreds to thousands different social networks, we only have a chance in case we distinguish ourselves and bring a lot of value to our users. Considering that we have put a lot of effort to shift from the so-called Red Ocean to a Blue Ocean (Mauborgne & Chan, 2017).

12.G.i. Pioneer-Migrator-Settler Map

Pioneer Migrator Settler Sponsored Challenges No regular ads Writing comments Paid Challenges Increased Data Privacy Follow Functionality • Business Licenses • Customer Support Timeline Less/No Fake Profiles • No Premium Version Profile Events Post Rating Measureable Reputation No custom content No Direct Messaging • Ernesto - Mascot Grayscale, interactive UI

Figure 19: Pioneer-Migrator-Settler Map

As you can see in the pioneer-migrator-settler map (see Figure 19, p. 43, above) we already discussed several of those points. Question marks depict that they might generate revenue, but at this early stage we are not able to estimate any number. Nevertheless, we listed the reasons for the categorization below.

12.G.i.1. Pioneers

Sponsored Challenges

Raffles by doing good: Users can win vouchers, products or rebates by accomplishing challenges, which make the world a better place (e.g. environment, health and social impact). Companies have to pay based on their offering item (product > voucher > rebate). The more worth their offering the less they have to pay.

Paid Challenges

Companies can submit own challenges for users. Those challenges can be connected to their own enterprise (e.g. Take a picture in front of Pizza hut, post it on Instagram and hold the door open for 2 strangers). Companies have to pay to hand in their own challenges.

Business Licenses



Organizations can have Business Profiles, which allow them to collectively form Marketing campaigns through their employees to improve their reputation and their working atmosphere.

Events

We try to encourage the interaction in real life instead of the internet. Therefore, we will collaborate with NGOs and companies to organize several events which do something good and make fun. Events can have entry prices and we will earn money through sponsoring etc.

Reputation

Users and companies have a reputation. The basic reputation comes from how many challenges you solved (how much good did you do?). This value can be also attached to a CV for applying to a new job. Companies have a 2nd reputation which comes from how many challenges they sponsored or paid. Enterprise accounts might be paid (subscription model).

Less/No Fake Profiles

By creating own mechanisms, we can reduce the amount of fake profiles or even eradicate them completely. E.g. by using SMS verification, multiple OAuth, ...

No Direct Messaging

Users cannot direct message another. We try to increase the interaction in the real world outside of the internet.

Ernesto – Mascot

We have a cartoon mascot 'Ernesto, the snail' which is sarcastic and lives unhealthily. He is not a role model, but is your friend along the way. A virtual mascot can be held under control.

Grayscale, Interactive UI

The social network is in grayscale. Users which are logged in see their own posts, interactions (comments, likes, ...) in color. On this way users see on what scale they made the world a better place.

No Custom Content

Users cannot post custom content like pictures/videos from the last vacation. Content can only be published when a new challenge has been accomplished and even that content is not supposed to be unrelated to the challenge.

12.G.i.2. Migrators

No regular ads

We don't show regular ads and therefore don't earn money through ads itself. Our "ads" are only shown related to a paid/sponsored challenge.

Increased data privacy

We don't gather data to sell/use it for our own purposes.

Customer Support

We use a deterministic, button-/pattern-based chatbot. More complex inquiries are redirected to our human customer support. No direct revenue, but we save costs by less employees in the customer support.

Post rating (see Anti-Mobbing Measures, p. 54, below)

Posts can be rated (likes, dislikes). In contrast to regular social networks, posts with a huge amount of downvotes will be hidden and reviewed or even deleted immediately. This increases post quality.

No premium version



We don't offer a premium version. Every user has the same rights on our platform.

12.G.i.3. Settlers

Writing comments

Users can write comments on posts.

Timeline

Users will see a timeline (although only accomplished challenges will be listed).

Follow Functionality

Follow/Unfollow activities of other users (follow users).

Profile

Users have a profile. Where all their content is listed.

12.G.ii. Eliminate-Reduce-Raise-Create Grid

Following graphic (see Figure 20, p. 45, below) depicts what we want to change comparing to other social networks. All terms are explained in the previous chapter (see Pioneer-Migrator-Settler Map, p. 43, above).

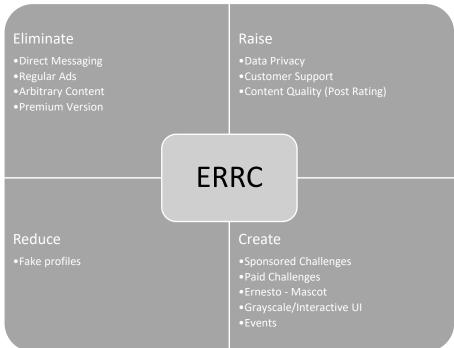


Figure 20: Eliminate-Reduce-Raise-Create Grid

12.G.iii. Four Hurdles to Strategy Execution

New concepts are often directly connected to big hurdles. Based on that we evaluated our biggest challenges which we have to overcome (see Figure 21, p. 46, below).





Figure 21: Four Hurdles to Strategy Execution

12.G.iv. Three Tiers of Noncustomers

Companies usually know what their target group is (see Target audience, p. 30, above), but don't define what and how to expand their market. Following graphic (see Figure 22, p. 46, below) describes which user groups might need a longer time to convert and what needs to be done. Please note that the total demand potential is just an assumption and might be totally inaccurate.



Figure 22: Three Tiers of Noncustomers



Teenagers are in the "Soon-to-Be"-Share as they care less about environmental, social and health issues than many other people. Additionally, some of them are either not eligible, based on their age (local laws), for raffles or they are not even interested in winning products, vouchers or rebates as they don't have to pay everything up front anyway. Nevertheless, they will convert to our social network when Wavect starts to become "cool" and there is already a bigger user base.

(Big) Influencers won't use Wavect in the beginning as it won't be lucrative for their personal brand. As the user base grows also influencers will start to migrate. Additionally, we plan to give influencers early access to our application to let some of them convert earlier. By early converted influencers the user base grows faster and as a result more influencers will convert or add Wavect to their social media channels.

People above approximately 50 might not even discover Wavect until it reaches a really big user base. Moreover, they might not use it at scale as they don't spend too much time on social media anyway. Despite being a social media application, we plan to organize a lot of events which then might convert this group.

12.G.v. Strategy Canvas

The Strategy Canvas has been elaborated to have a direct, visual comparison between some major competitors. The comparison has been made according to B2B/G-Value-Propositions (see 12.B.ii B2B and B2G, p. 35, above) as they cause our major revenue. Following figure (see Figure 23, p. 47, below) has been explained in the next few pages.

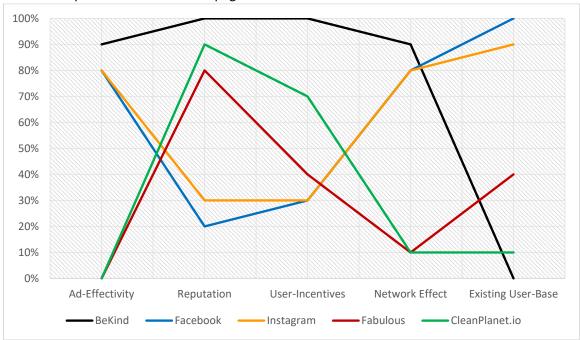


Figure 23: Strategy-Canvas, B2B

12.G.v.1. Ad-Effectivity

The higher the Ad-Effectivity the higher the potential to reach new customers for your business via ads or comparable communication.

12.G.v.1.a. Wavect

When users accomplish a challenge a watermark (e.g. company logo) can be displayed on the users' video/picture in the right downward corner as well as the challenge itself shows which organization has sponsored/paid it. Additionally, an organization has an own reputation which represents how



much they encouraged private people via several incentives (e.g. rebates, ...). Moreover, as videos/pictures of challenge accomplishments might be sensitive, emotional, sad, funny, happy, moving or cause any other emotion that might encourage other users to share the post on external social-media (e.g. Facebook, Instagram, ...). As we will be active on YouTube and other social-media too, we might ask several users for permission to repost their videos/pictures in our ads or/and posts. Thus, users are strongly bound to our challenges which can increase the users' attention and therefore the ad-effectivity significantly. Via specific user data to make challenges for relevant (e.g. smoker, ...) we could also do targeted CSR/Branding which is not offered by any platform to date. We want to mention here, that we do not show any regular ads especially when they could annoy a user in any way.

12.G.v.1.b. Facebook & Instagram

Facebook/Instagram gathers a lot of user-data to provide targeted ads. These might be quite relevant for users and thus convert a lot of them to buy a certain product or service. Nevertheless, people are annoyed by regular ads, don't feel connected by most of the advertisements and care about their privacy. Although, targeted ads are really effective, an ad needs a lot more impressions today as a few years ago as people are used to ads and get less sensitive to them.

12.G.v.1.c. Fabulous

Fabulous does not show any type of ads. Thus, enterprises have no possibility to promote their products, improve their image nor can they do CSR on this platform.

12.G.v.1.d. CleanPlanet.io

CleanPlanet.io is not a software application itself. It's basically just a cryptocurrency. Users get tokens for collecting waste and taking pictures. These pictures are posted on other social-media (e.g. Instagram) with certain hashtags. Thus, no ads can be shown related to their offer.

12.G.v.2. Reputation

How good is or may be the reputation of the competitor itself?

12.G.v.2.a. Wavect

We aim to encourage social interaction in the real world, protect the environment and to encourage a healthier lifestyle. Regular events as well as trying to enhance the working atmosphere within organizations etc. should give us a quite good image despite that we are not an NGO.

12.G.v.2.b. Facebook & Instagram

Since Instagram has been bought by Facebook, the reputation of that social network dropped a lot amongst many people (at least those who care about their privacy). Nevertheless, there are still people who don't know that Facebook owns Instagram, as well as Instagram itself does not have a that bad of an image. Moreover, it is considered something good to not be on Facebook and Instagram at all, even minimizing the time spend on that platform is encouraged by society.

12.G.v.2.c. Fabulous

Fabulous has won some prizes according to our research and aims to encourage people to live healthier via challenges/habits. This gives them a good reputation but the user is not bound to the enterprise or the app itself, people can only change their health habits which restricts people in doing something good for others.

12.G.v.2.d. CleanPlanet.io

As people receive crypto tokens when posting pictures/videos of gathered/recycled waste with certain hashtags on social-media, CleanPlanet.io has an amazing image although many people cannot handle cryptocurrency or don't even know what it is.



12.G.v.3. User-Incentives

What incentives does a user have to use the application? This factor is relevant to indicate the potential on how many users might be active on a platform.

12.G.v.3.a. Wavect

Please see our value-proposition-canvas for brevity (see Figure 14, p. 34, above).

12.G.v.3.b. Facebook & Instagram

The main user-incentive in using Facebook or Instagram is basically presenting themselves, being rewarded via e.g. likes and to stay connected. Nevertheless, the social-network market is oversaturated and this concept seems to reach older people and loose steadily younger groups.

12.G.v.3.c. Fabulous

Fabulous motivates people to live healthier by providing challenges. Those challenges are neither sponsored in any way nor get people rewarded in any way other than receiving accomplishments.

12.G.v.3.d. CleanPlanet.io

CleanPlanet.io rewards people with cryptocurrency-tokens which may or not have any real value (very speculative).

12.G.v.4. Network Effect

In this context a network-effect describes how big the potential is to reach a lot of other users and non-registered people.

12.G.v.4.a. Wavect

We don't offer a chat functionality and users cannot post content which is not associated to an accomplished challenge. This might lower the network effect. Nevertheless, users are interconnected via the typical follower-paradigm. In spite of that we organize a lot of physical events, many in collaboration with other organizations. Moreover, content posted on Wavect might be more probable to be shared on other social-media which actually opens a lot more possibilities.

12.G.v.4.b. Facebook & Instagram

Facebook and Instagram are amazing examples for the classical network effect. People can follow each other which causes transitive connections (the friend-of-a-friend, ...). Unfortunately, the majority of interactions happen online.

12.G.v.4.c. Fabulous

Fabulous is not a social-network and does not provide a functionality to interact with other users. Content may be shared on social-media like Facebook, ...

12.G.v.4.d. CleanPlanet.io

CleanPlanet.io is not even a software for consumers itself. Thus, their business concept is fully dependent on already existing social-media and thus, has no own network-effects.

12.G.v.5. Existing User-Base

Describes/States how many (active) users the competition has.

12.G.v.5.a. Wavect

As we are still in development, we don't have any existing user-base. People don't like to switch between platforms nor do they like change most of the time, which makes it even harder to convince people to use our application. Therefore, events, strong partners and other marketing campaigns are essential for our success (see 8.E. Growth strategy, p. 17, above).



12.G.v.5.b. Facebook & Instagram

About 2.7 Billion people use Facebook, Instagram or an associated service (April 2019). Facebook has still more active users than Instagram. Although we don't directly compete with them, they can be considered as indirect competitors. ²⁶

12.G.v.5.c. Fabulous

As of April 2019, the mobile application has been downloaded about 300k times worldwide which makes them also a considerable competitor.²⁷

12.G.v.5.d. CleanPlanet.io

Probably, one of our smallest competitors who does not offer a platform but uses existing infrastructure like Instagram and Steamit (Blockchain-based social network). In May 2019 there have been exactly 164 people who have participated in one of their clean up challenges. Nevertheless, users already have accomplished about 1.300 challenges in over 28 countries.²⁸

13. Challenges

As the whole social network is based on challenges, we will need a lot of them. They all should make the world a better place (environment, social, health, ...), but they should not interfere with any laws or/and cultural beliefs and should not have a negative effect on any enterprises or even the economy in general. To get along with these guidelines we will need a strict quality management to sustain a good image and avoid any compensation claims or punishments.

13.A. Challenge constraints

At the very beginning all challenges (also translated into different languages) will be the same for every user. While growing we will add some constraints for challenges. Therefore, some challenges only appear to certain users (e.g. location-dependent or based on user data) to cover different cultural beliefs. Thus, some challenges might be only available to certain continents, countries or even facilities (e.g. college). Some examples, which might be location-dependent:

- "Gather 5 cigarette stubs and dispose them properly." -> only possible in countries where cigarettes are legal (e.g. in Hungary it won't be legal) or e.g. in Singapore they have a very strict law to protect the environment (therefore hard to find cigarette stubs).
- "Ask a person who eats alone, if you can sit with them." -> makes mostly sense e.g. for environments like college etc.

On the other side, we will offer later the option that users can (don't have to) provide some private information about themselves (not shared to public). Such information could be about unhealthy- (e.g. Smoker, amount of sport they do, has Diabetes, ...), social- (e.g. Working in an office, being in a relationship, ...) or/and environmental behavior (e.g. recycles, has a car, ...). Based on that information we could provide personalized challenges to users.

13.B. New challenges

All challenges need to go through our quality management process (see Quality management, below). As we will need probably a huge amount of challenges, we need to distinguish between different kind of sources. We will rely on the supply of new challenges (all of them need to be reviewed by the quality management) on following scheme (see Figure 24, p. 51, below).

²⁶ (Roth, 2019)

²⁷ (Sensortower Inc., 2019)

²⁸ (Cleanplanet, 2019)



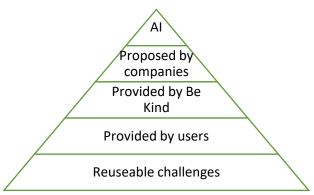


Figure 24: Challenge Creation - Possibilities

13.B.i. AI (machine learning)

To save costs and increase efficiency we could develop a machine-learning algorithm which proposes new challenges suitable to different cultures, languages and are not interfering with the interests of big companies and the laws of states.

13.B.ii. Proposed by companies

As described before (see 10. Financial plan, p. 22, above) companies could propose own challenges after paying a fee which are within our community standards (which means that the challenge needs to have a positive impact).

13.B.iii. Provided by Wavect

We will probably always create challenges by ourselves to keep the fun alive.

13.B.iv. Provided by users

Also, users could propose challenges. That the challenge can be used by Wavect might be as usual a small checkbox at the end of the form or is even included into our overall usage agreement. As this kind of source is really unreliable, we should introduce this feature only after establishing an efficient quality management (see Quality management, p. 51, below).

13.B.v. Reusable challenges

As many challenges (especially short-term challenges like: "Hold the door open for at least one person today.") could be reused multiple times, we also might rely on that source of challenges. Also, these kinds of challenges need to be reviewed regularly by our quality management.

13.C. Quality management

Wavect won't have that much resources to sustain a state-of-the-art quality management from the very beginning, therefore as discussed, we will start our social network in a small group which then grows consistently. User feedback will be gathered throughout the whole process (e.g. questionnaires). Before publishing a new challenge, we will could approach several enterprises to find possible sponsors for it (later we could provide a platform where enterprises could register themselves). As we are starting with a small group of users and then start to grow slowly, we have separated the quality management measures as following. We should also keep in mind that we might need to update/review older challenges.

13.C.i. QM for 0-100 users

Challenges are written for the small group explicitly as we they all will be near each other (same culture, laws, ...). Considering the small user base there will be no extra quality management provided.



13.C.ii. QM for 101-1000 users

If we are still in Austria or at least very similar cultures (e.g. Germany, Switzerland, ...), all challenges are written after a short recherche (good with laws, culture, ...). After publishing the social network internationally, we might need to recherche more thoroughly.

13.C.iii. QM for 1001-10,000 users

As people from different cultures might use the network now, we should start with a stricter quality management. From now on at least two people are needed to publish a challenge.



Figure 25: Quality management for 1001-10,000 users

13.C.iv. QM for 10,001-n users

This is the current design of our fully worked out quality management for creating new challenges. We know that the following process will be adapted as the project goes on. Here are also at least two people needed to publish a new challenge.



Figure 26: Quality management for 10,001-n users

13.D. Challenge verification

As users receive points for their reputation (to apply for a job, etc.) and some challenges are even sponsored with real products/vouchers/exclusive offers we will need to have an intuitive verification system, which ensures that users accomplished the challenge. As we will have a lot of different challenges, we can't rely on a certain verification method and will need to maintain several verification methods which might be applied on different challenges.

The better our verification system the more likely our reputation and reward system will work in practice. Not every verification method is suitable for each challenge and some verification methods might require another verification to ensure the accomplishment. Moreover, the verification of a challenge could be optional to post it but might be required to get points and be eligible for raffled products. Possible verification methods will be:

13.D.i. Ask a friend

Verification could be done by asking a friend who trusts the user, or which even was next to the person when he/she has accomplished the challenge.

13.D.ii. Video/Picture

By posting a picture or/and video when accomplishing the challenge, we could also ensure that the user has achieved it. By a simple rating system (comparable to "like" and "dislike") users can downand uprate an accomplishment and if an achievement gets a lot more downrated then we could automatically assume that the user has not achieved it properly. Additionally, we could later introduce a machine-learning algorithm (e.g. maybe use of Yolo) which is targeted for certain challenges (especially those challenges which might be reused a lot). Please see also what actions we take against mobbing (see Anti-Mobbing Measures, p. 54, below).



14. Profiles

Each user should only have one account. By preventing/reducing the amount of fake-profiles we would enhance content quality, the users' reputation has more value as you can't just create a new profile and even enterprises might feel more comfortable to raffle their vouchers/products or rebates on our platform.

14.A. Profile verification

To ensure that people can't just create a new account (e.g. when they got bad ratings), we might consider following solutions. We decided that we won't provide a regular registration form, which makes a registration impossible without using one of the following services.

- New users need to register (e.g. via OAuth, ...) with at least two accounts (e.g. Facebook, Instagram, Google+, ...) to make it much harder to create multiple (fake-) profiles as they will need to create new profiles on those social networks as well.
- Additionally, users might be able to register via SMS/WhatsApp (or other common messengers which are directly connected to a phone number). As commonly used, a user would receive a temporary token which has to be provided on the registration page during a certain amount of time to verify their phone number.

To ensure a good user experience, we could/should offer multiple registration methods as not every potential user might have two social networks or a smartphone.

15. Legal

Particular relevant legal aspects and how to avoid related infringements are covered in this chapter in case they haven't been elaborated in other chapters.

15.A. Data privacy

As data privacy is quite relevant for social networks, we decided to mention it here explicitly. According to European law (e.g. DSGVO) we only save data which is necessary to fulfill an explicitly purpose and will delete the information as soon as it is not needed anymore.

Additionally, we will write down a processing technique to guide employees and control all processes on how to annihilate data after the purpose of data has expired as well as explicit requests to delete specific data. This is necessary because that process needs to be exhibited in case of any regulatory controls. Furthermore, new or all users, after changing the processing technique, need to comply to our current usage/data privacy policy to use the software. This will be done before the first publicization of the application. Moreover, it is important to note that an enterprise must have a data security engineer as soon as it has more than 9 employees regardless of their employment extent.

In general, we want to implement all relevant data privacy regulations as soon as possible which includes for example also the possibility that users have the ability to change or request a change on their data in case they have changed in reality.

15.B. Copyright – Upload Filter

Since 26.03.2019 the European Union reformed the copyright law. The two most controversial regulations have been article 11 & 13. Especially the so-called 'Upload-Filter' might be relevant for us as users can upload content on our social network. As we are a startup the regulation excludes us in case our company hasn't been founded over 3 years ago, has less than 5 Million users **and** earns less than 10 Million Euro per year.



Although this might put us a little bit under pressure as we are forced to implement such an Upload filter at the latest within three years after founding the enterprise, it suits perfectly our original intent. Our concept only allows people to upload recordings or pictures to proof that they accomplished the challenge (see 11.AConcept, p. 27).

16. Controversial

This chapter covers more controversial or sensitive topics which should not be underestimated when establishing such a social network.

16.A. Anti-Mobbing Measures

We enforce a verified a profile (see Profile verification, p. 53, above) to ensure that people can't just create a new account when receiving a low reputation or getting banned by us when violating community standards. This ensures that raffles can't be influenced negatively on a big scale, people are more cautious when posting content as they are not as anonymous (see Pioneer-Migrator-Settler Map, p. 43, above) as on other social networks and an users reputation (see 16.BUser reputation – Retain Dignity, p. 54, below) is more relevant to employers as it's harder to fake.

Although people are uniquely identified, there is still a risk on getting mobbed on our platform. By eliminating direct messages to encourage contact in the real world we also reduce the probability to get insulted directly. People can only communicate with each other via likes/dislikes and comments on a person's post (no custom content, see Concept, p. 27, above) and even comments are blocked if they contain a blacklisted term. Furthermore, comments and posts can be reported and will be reviewed manually. To reduce work-force we also think about a moderator functionality, what makes motivated users eligible to review content.

As we decided to use likes and dislikes to enforce a better post quality, we found that dislikes might be also misused as channel for public mobbing. Therefore, the amount of downvotes on a user's post will be only visible to the post creator itself. While regular likes are visible by everyone who can see the post, dislikes are only visible to the content creator. On this way we have a good tradeoff between both aspects.

16.B. User reputation – Retain Dignity

A user reputation enhances post quality, motivates users to act ethically and to evaluate fake profiles as well as scammers. The reputation can be attached to curriculums and represents the effort someone has taken to make the world a little bit better.

Nevertheless, there are a lot of controversial discussions about such a social reputation. Introducing it the wrong way as we see it in China, people could tend to exclude people with lower reputation from certain events, public transportation or even supermarkets.²⁹ To avoid such consequences even though our brand will be managed privately as long as possible, we will take several counter-measures.

First-time users / users who are registered newly will be informed that the social reputation is not a representation of the value of a human's life and will never be. A user's reputation might be representative for what he/she contributed and shared to the world after registration on Wavect,

²⁹ (Yongxi & Anne, 2017)



nothing more. Although we want to strongly encourage this point of view, we only have limited capabilities to influence peoples mind.



17. Attachments

This section includes relevant attachments (e.g. CVs of team members, etc.).

17.A. Financial Plan

Word is not the best tool to setup calculations. Thus, you may find an Excel-File attached which contains our current finance plan. Please also see previous relevant chapters (see 10. Financial plan, p. 22, above).

17.B. Curriculums of team members

As the business plan is accessible to all team members, we decided that one person has all CVs on their device and attaches them on demand.

17.C. Non-Disclosure-Agreement

As our NDA is mentioned several times, we will attach it to the business plan. All readers either have to sign our NDA or/and a non-disclosure-agreement of them to their own company that they won't share this document or any information related to that.

17.D. Big/Detailed figures

Some figures are very detailed and may not be readable well within this word document. Therefore, following figures have been attached in a well-readable format. If we forgot to attach those figures separately and you cannot read them please get in touch with us!

- Business-Model-Canvas (see Figure 13, p. 30, above)
- B2C: Value-Proposition-Canvas (see Figure 14, p. 34, above)
- B2B: Value-Proposition-Canvas (see Figure 15, p. 35, above)
- Environment Analysis (see Figure 16, p. 37, above)



References

- Achor, S. (2010). *The Happiness Advantage: How a Positive Brain Fuels Success in Work and Life.* USA: Currency.
- Aleksandra. (2018, 9 5). *Seotribunal*. Retrieved 5 7, 2019, from 101 Mind-Blowing Digital Marketing Statistics: https://seotribunal.com/blog/digital-marketing-statistics/
- Amazon-Web-Services. (2019, 4 2). *Aws.Amazon.com*. Retrieved from DynamoDb: https://aws.amazon.com/de/dynamodb/
- Cleanplanet. (2019, 5 16). *Cleanplanet.io*. Retrieved 5 16, 2019, from Ranking: https://cleanplanet.io/ranking-smt/
- Clifford, C. (2019, 3 22). *HubSpot*. Retrieved 5 7, 2019, from TAM SAM SOM: What Do They Mean & How Do You Calculate Them?: https://blog.hubspot.com/marketing/tam-sam-som
- Cooper, P. (2018, 6 5). *Hootsuite*. Retrieved 5 7, 2019, from Advertising Stats that Matter to Marketers in 2018: https://blog.hootsuite.com/social-media-advertising-stats/
- Cretu, A. E., & Roderick, B. J. (2007). The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial marketing management*, *36*(2), pp. 230-240. doi:https://doi.org/10.1016/j.indmarman.2005.08.013
- Diener, E., & Seligman, M. E. (2002). Very Happy People. *Psychological Science*, *13*(1), pp. 81-84. doi:https://doi.org/10.1111/1467-9280.00415
- GfK Austria. (2017). Market Opportunities & Innovation / GfK Consumer Life. Austria: GfK. Growth from Knowledge. Retrieved 6 24, 2019, from https://www.gfk.com/fileadmin/user_upload/website_content/products/DE_20171113_GfK _Consumer_Life_Einblicke_in_das_taeglich_Leben_Ihrer_Zielgruppe.pdf
- GfK Austria. (2018/2019). *CSR Monitor 2019.* Austria: GfK Austria. Retrieved 6 24, 2019, from https://www.gfk.com/fileadmin/user_upload/country_one_pager/AT/documents/Angebot_CSR_Monitor_2018_19_CGR.pdf
- Griesemer, R., Pike, R., & Thompson, K. (2019, 3 28). *Golang*. Retrieved 4 1, 2019, from Index: https://golang.org/
- Kemp, S. (2018, 1 29). Hootsuite. Retrieved 5 7, 2019, from 11 New People Join Social Media Every Second (And Other Impressive Stats): https://blog.hootsuite.com/11-people-join-social-every-second/
- KMU Forschung Austria Austrian Institute for SME Research. (2018, 1 1). KMU-Forschung. Retrieved 5 7, 2019, from Facts and Figures SME Data: https://www.kmuforschung.ac.at/facts-and-figures/kmu-daten/?lang=en
- Lange, K. (2019, 115). *Manager-Magazin*. Retrieved 6 24, 2019, from Top 10 Global Consumer Trends: https://www.manager-magazin.de/unternehmen/handel/top-10-global-consumer-trends-2019-von-euromonitor-verbrauchertrends-a-1247990.html
- Mauborgne, R., & Chan, K. W. (2017). Blue Ocean Shift: Beyond Competing-Proven Steps to Inspire Confidence and Seize New Growth. London, United Kingdom: Pan Macmillan.
- Pickard-Whitehead, G. (2019, 4 11). Small-Business Trends. Retrieved 5 7, 2019, from 73% of Small Businesses Invest in Social Media Marketing, Survey Finds: https://smallbiztrends.com/2019/04/2019-social-media-statistics.html
- Reichl, S. (2019). Consumer Trends. AMC Study 2019. Vienna, Austria: GfK Austria.
- Rotenberg, Z. (2017, 1 24). *Atiim*. Retrieved 4 24, 2019, from Top Companies that use OKRs: https://www.atiim.com/blog/top-companies-that-use-okrs/
- Roth, P. (2019, 4 1). *AllFacebook*. Retrieved 5 16, 2019, from State of Facebook: https://allfacebook.de/toll/state-of-facebook
- Schuldt, C. (2019). *Zukunftsinstitut*. Retrieved 6 24, 2019, from OMline: Digital erleuchtet: https://www.zukunftsinstitut.de/artikel/lebensstile/omline-digital-erleuchtet/



- Sensortower Inc. (2019, 5 15). *Sensortower*. Retrieved 5 16, 2019, from Fabulous Self care: https://sensortower.com/ios/us/fabulous/app/fabulous-self-care/1203637303/overview
- Statista. (2019, 3 1). Statista. Retrieved 5 7, 2019, from Prognose der Investitionen in die einzelnen Segmente der Onlinewerbung in Österreich im Jahr 2019 (in Millionen Euro): https://de.statista.com/statistik/daten/studie/418859/umfrage/investitionen-in-onlinewerbung-in-oesterreich/
- Steiner, S. (2012, 2 1). Top five regrets of the dying. *the Guardian*. Retrieved 6 24, 2019, from http://www.peterfitz.com.au/wp-content/uploads/2017/03/12-Top-five-regrets-of-the-dying.pdf
- Stream.io Inc. (2018, 7 30). GetStream. Retrieved 4 2, 2019, from Index: https://getstream.io
- Walliser, B. (2013). Sponsoring: Bedeutung, Wirkung und Kontrollmöglichkeiten. Springer-Verlag.
- Wirtschaftskammer Österreich. (2018, 5 1). *WKO*. Retrieved 5 7, 2019, from Jahrbuch 2018 English: http://wko.at/statistik/jahrbuch/2018_Englisch.pdf
- Wirtschaftskammer Österreich. (2018, 7 25). *WKO Zahlen, Daten, Fakten*. Retrieved 5 8, 2019, from Tiroler Wirtschaft in Zahlen 2018/19: https://www.wko.at/service/t/zahlen-daten-fakten/TWIZ_END_2018-07-25_2.Aufl_oS_1.pdf
- Yongxi, C., & Anne, C. S. (2017, 626). The Transparent Self Under Big Data Profiling: Privacy and Chinese Legislation on the Social Credit System. *The Journal of Comparative Law, 12*(2), pp. 356-378.
- Yoon, E., Guffey, H. J., & Kijewski, V. (1993). The effects on information and company reputation on intentions to buy a business service. *Journal of Business research*, *27*(3), pp. 215-228. doi:https://doi.org/10.1016/0148-2963(93)90027-M
- Zukunftsinstitut. (2019). *Megatrend-Documentation*. Deutschland: Zukunftsinstitut. Retrieved 6 24, 2019, from https://onlineshop.zukunftsinstitut.de/shop/megatrend-dokumentation/