

TECHNISCHE UNIVERSITÄT CHEMNITZ



Distributed and Self-organizing Systems Group

Planspiel 2018

Solid Team

Yichen Wang (Matrikel-Nr: 405548)

Dattatrya Raghunath Bhosle (Matrikel-Nr: 480211)

Mayur Tulsibhai Lakhani (Matrikel-Nr: 485315)

Aditya Rajeshkumar Shukla (Matrikel-Nr: 487070)

Chemnitz, 01 March 2019

Examiner: Prof. Martin Gaedke

Supervisor: André Langer

Monthly Log frame	vi
Part I Business Plan and Marketing	1
1 About us	1
1.1 Team name	1
1.2 Team LOGO	1
2 Our culture	2
2.1 Vision	2
2.2 Mission	2
2.3 Values	3
2.3.1 Curiosity is the bridge to Innovation	3
2.3.2 PMA is the key to harmony	3
2.3.3 Efficiency is the shortcut to success	3
2.3.4 User experience is the foundation of our existence	3
3 Social Media	4
4 Business Plan	4
4.1 Business Plan at First Glance	4
4.2 Business model Canvas	6
4.2.1 Key partners	6
4.2.1.1 Strategic	6
4.2.1.2 Joint Venture	6
4.2.1.3 Buyer-Supplier	6
4.2.2 Key Activities	7
4.2.2.1 Problem Solving	7



4.2.3 Key Resources	7
4.2.3.1 Physical	7
4.2.3.2 Human	7
4.2.4 Distribution Channel	8
4.2.5 Customer Segments	8
4.2.6 Product value	9
4.2.7 Cost Structure	9
4.2.8 Revenue	9
step 1: Define your vision	9
step 2: set your goals & objectives	9
step 3: Define unique selling propositions (USP)	9
step 4: know the market	10
Step 5: Identify product customers	10
Step 6: Research the Demand for the Business Plan	11
Step 7: Setting up Marketing Goals	13
Step 8: Defining Marketing Strategy	14
4.3 A quick look on rapid fire up round:	14
4.3.1 Channel Testing	14
4.3.2 Press	15
4.3.2.1 Relationship	15
4.3.2.2 Do all the work	15
4.3.3 Launch	16
5 Financial Terms	16
5.1 Crowdfunding	16
5.2 Bootstrapping	16

5.3 Return on investment	16
6 Revenue Generation	17
6.1 Production Model	17
6.2 Rental Model	18
6.3 Advertising Model	18
6.4 Licensing Model	19
Part II Products	21
Implemented Product	21
7 Introduction	21
7.1 What is this?	21
7.2 Who's it for?	21
7.3 How it works	21
7.4 Milestone for February	22
8 Problem Statement	22
8.1 User persona	22
8.2 Problem scenarios	27
9 Journey Map	28
10 Ideation	31
10.1 Stakeholder analysis	31
10.2 Problem analysis	33
10.3 Objective analysis	34
10.4 Strategy analysis	35
11 Hills	35
12 User Journey Map	36
13 Paper Prototyping	36

13.1 Login	37
13.2 Index	39
13.3 My Photos	40
13.4 Comments	41
13.5 Upload Photos	42
13.6 Events	43
13.7 Event Search	44
13.8 Scheduler-My Event	45
13.9 Scheduler-New Event	46
13.10 Scheduler-My Statistics	47
13.11 Event Details	48
13.12 Contact	50
13.13 Add Contact	51
Unimplemented Product	51
14 Story1: Music List Management	51
14.1 Background	51
14.2 Motivation	53
14.3 Music industry within solid ecosystem	54
14.4 LFA analysis	57
14.4.1 Stakeholder analysis	58
14.4.2 Problem analysis	59
14.4.3 Objective analysis	59
14.4.4 Strategy	60
15 Story2: Patient Medical record history	62
15.1 Introduction	62

15.2 Problem Scenario overview	63
15.3 User journey map	64
16 Analysis output of feasibility	65
17 Frameworks and Methodology	65
17.1 Agile	65
17.2 Design Thinking	66
17.3 Approach for understanding problem and solution	67
Part III Tools and Technologies	68
18 Tools	68
18.1 Amazon Web Services (AWS)	68
18.2 Project Management Tools	68
18.2.1 Microsoft Project	68
18.2.2 Trello	69
18.2.3 Google Calendar	70
18.2.4 Gmail	70
18.2.5 Slack	70
18.2.5.1 Teams	71
18.2.5.2 Messaging	71
18.2.5.3 Integration	71
18.2.6 Skype	71
18.3 HTML, CSS & Bootstrap Framework	71
18.4 JavaScript	72
18.4.1 Dynamic Typing:	72
18.4.2 Prototype-based (object-oriented)	72
18.5 jQuery	72

19 Solid	72
19.1 Solid Introduction	72
19.2 Solid Ecosystem	73
20 Conclusion	73
21 Appendix	I
21.1 Activity List	I
References	VIII

Monthly Log frame

October 2018

Objectives	OVIS	SOI	Assumptions
Goal: To build a team as a real startup company.	A passionate team with full positive energy.	During lecture by Prof.M.Gaedke in October.	N/A
Purpose: Students get experience of establishing a startup company.	A well described company profile.	Feedback from the tutor during October.	Mission/Vision/Value will be learned in practice in October.
Results: <ul style="list-style-type: none"> - Team Name found - Company Logo designed - Team Website designed - Team Culture formed 	A website that shows the team, logo, its name and culture.	During lecture by Prof.M.Gaedke in October.	Company culture and team spirit will be formed in October.

November 2018



Objectives	OVIS	SOI	Assumptions
Goal: To start a project as a real startup company.	A well written report that describes the project.	During lecture by Prof.M.Gaedke in November.	N/A
Purpose: Students get experience of starting a project.	A well described problem statement and user story map.	Feedback from the tutor in November.	Skills of user alignment and team spirit will be improved in November.
Results: <ul style="list-style-type: none">- Topic chosen- Website updated and optimized- Problem statement defined- User story created- Solid concept learned	A pitch presentation that well described the team, topic, and problem statement.	During lecture by Prof.M.Gaedke in November.	Solid concept and user alignment will be learned in November.

December 2018

Objectives	OVIS	SOI	Assumptions
Goal: To learn new technologies within a team/company.	A product prototype using new technology	Team log book	N/A
Purpose: Students get experience of team learning and get skills of solid technology.	A standard workflow and behavior pattern of team.	Consultant meeting with the advisor in December.	Ability of learning new knowledge and solving problems within a team.
Results: <ul style="list-style-type: none">- Solid angular framework learned- RDF learned- Basic functionality developed	A prototype that demonstrate the new learned technology and basic functionality.	<ul style="list-style-type: none">- The login function,- Fetch data from your own pod and other's public folder- Edit your profile.	Skills of solid framework and teamwork will be improved.



- First prototype developed			
-----------------------------	--	--	--

January & February 2019

Objectives	OVIS	SOI	Assumptions
Goal: To practice product delivery within a team/company.	Note of the planspiel	During final pitch by Prof.M.Gaedke in March.	N/A
Purpose: Students get experience of product development lifecycle.	Demo and documentation	Compare with demo and product backlog	Team pass their planspiel
Results: - Team development - Agile lifecycle learned - Solid related Technologies learned	A working prototype that fulfills the product backlog of first release A well written documentation for delivery	- Product backlog - Final Pitch	The basic process of a product release will be learned and practiced

Part I Business Plan and Marketing

1 About us

WEBIND is a group of passionate web engineering students from TU Chemnitz who are working on their planspiel. This team is a small prototype of a startup company. We are highly interested in creative ideas, current trends and innovation, trying to bring some impact on the web industry and conduct a revolution to the traditional business pattern. We are binding to new technologies and trends, making people's life smarter within web. In a word, we bind the future.

1.1 Team name

It's not easy to create a proper company name. We did a lot of research and we've got a "guideline" about how to make a good name for a startup company. After that we checked the famous IT companies in this world. And we found that guideline is useless because there's no traceable rules for a name to be famous. Some names are meaningful, and some names are meaningless. But one common thing is, they are all easy to remember. After brainstorming, we got our company name: WEBIND. It's simple words, easy to pronounce and can be explained in different separating ways. First of all, as the lecture always told us: the web is all about connecting people. We want to bind to our customers Clients, stakeholders with the web and devices and provide them perfect services. Second, it indicates ourselves. We stick together, and we are a united team. Besides, if you separate webind in Web. in. d. We can extend our name to our slogan: Web in daily life, we bind. Most importantly, if you separate webind in web. ind. you will see it is an abbreviation of web industry. That's what our company do about.

1.2 Team LOGO



Figure1.1 Webind Logo



We created a ball model, and then decorated the surface with dots and nets. We know that, Globalization is everywhere and that makes the world connected. WEBIND is connected with every Person on this globe. Different Points are Connecting together from all round the world and make our stand One Unique. Our logo was made by adobe illustrator and Paint 3D. We use the blue color because blue is used in corporate logos as it creates a sense of security while showing loyalty and professionalism. It has more technological sense and has been widely used by businesses related to software, web and digital technologies.

2 Our culture

We are a diverse cultural team, which has different strategies, business logics and management skills. It's not easy for us to achieve a common agreement. However, through discussion we can always find a brand-new way out. This is the charming of teamwork. Team culture is a living and iterative thing. After one month's working. Our team now has the unique work behaviors and routines: we meet everyday, so we feel like a family. We are Passionate for learning new skills and technology. Being on time and communication are the core Principle for us.

2.1 Vision

We want to become a leading company and revolutionize the way of web related developments from Saxony by 2020.

We want to be the leader in web related area. We want to be the first market mover and standard designer rather than a follower. In the future, we want to change the existing pattern of how people using web and devices and bring them a brand new better solution in their daily life.

2.2 Mission

Creativity and innovation continue to drive us forward in our belief that we can create smart solution to interact people with new generation web and devices.

We are not just satisfied with current problem solutions. We will always be curious of the new technologies and trends, fearless about drawbacks, keep exploring new possibilities. Eventually, a brand-new solution to help our customer solve their problems in a cost efficient and more advanced way.

2.3 Values

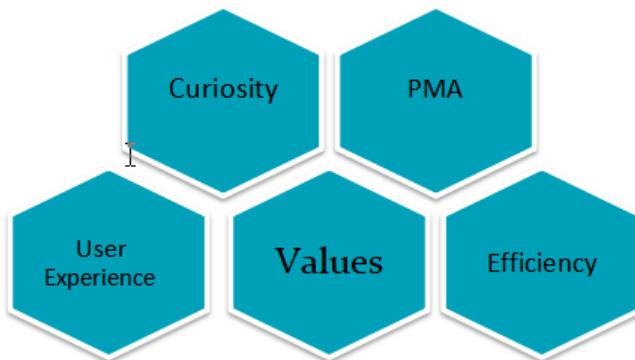


Figure 2.1 Values

Through discussion, we take PMA, Curiosity, Efficiency and User Experience as our most important values.

2.3.1 Curiosity is the bridge to Innovation

We want to break the existing pattern of either people's mindset or the industrial routine. We shall always be active to learn new things, always unsatisfied about current achievements, fearless about the drawback. Sometimes, be weird, think out of the box, we will find a brand new possibility to the solution.

2.3.2 PMA is the key to harmony

In team working, it is important to have every member work with positive mental attitude(PMA).To better communicating with each other, we shall always be ready to hear people's advice and respect them. In order to maintain a healthy financial status, we should be active about our tasks and proactive to unknown challenges.

2.3.3 Efficiency is the shortcut to success

To be the first market mover, efficiency is very important. Team members should be on time and have clear timeplan about following tasks. Meanwhile, in execution level, team members should be quick: fast prototyping, quick react to changes. And sometimes, when we made a bad decision, we abandon it also quick.

2.3.4 User experience is the foundation of our existence

As a startup company, our purpose is to serve our users. Anytime, user's satisfaction always comes first. We shall make continual improvement and keep our services up to date

3 Social Media

We know that, connection is so much important in our life. WEBIND is a company that works on the same concept to make connection everywhere and bind the customers. So, we are here regarding queries, questions related to the web. We welcome you on our social media. It would be good to see you here:

Fb: Facebook is the great source to share your moments. You can find here our culture and best team and join us.

https://www.facebook.com/WEBINDprofile/?modal=admin_todo_tour

Twitter: If u want to say something related to our company, the results, or any desirable value, we take your tweets as positive and try to make happier.

<https://twitter.com/Webind3>

LinkedIn: You want to do business with us and want to get inspire by different people. Let's connect via LinkedIn. We assure, you will never disappoint with our services and relations. We make your business more successful.

<https://www.linkedin.com/in/webind-tech-939359174/>

4 Business Plan

4.1 Business Plan at First Glance

Nowadays Many companies are starting their own business with 5 years of the duration for operation. Many analyses are said that 90% this scenario has gone failed. One research says only 1:10 proportion are happened from 10% of these plans. That's why the reason is to make a good business plan when you start up some new company with a new idea. At the first step, we have to define a good vision of the company which will clear in which direction we have to move forward.

Our vision is to become a successful leading company from Saxony. To make this dream true we need duration which is by 2021 because timeline will give you statistics regarding where you are and how much far to achieve your goal and milestones. We need also a nice mission which tells us how we have to apply our creativity with new ideas to achieve smart connectivity new generation web and devices. Two more things we have to focus which is really important in this context are cost structure and Age groups with whom are you moving forward in future. Now let's focus on our business plan in more depth which tells you to have we are starting from the low-cost structure of investment and we will expand with large proportional revenue generator in the future. We believe that if your product is



already existing in the market then you are late. Your product should be that which has more demand in the future. We always find new opportunities which will expand our business with a high level of growth.

At a first stage to start up the business we have made WEBIND profile live by making a website. For this profile, we have invested little cost(for Domain purchase, Hosting, Software purchase) as per the monthly use of Amazon Web Services. During the research regarding a new topic or what is the current scenario in the web. We found a major problem regarding social apps in the market. The problem is your data which is already stored in the servers of the existing apps which you have already used in the past. These servers are using your data by making some artificial intelligence process to

make a video or for metadata. We found this problem very serious and now we have started how to find a solution regarding these things in the next step. After some days we gained new approach solid which will new framework to put the web in decentralization.

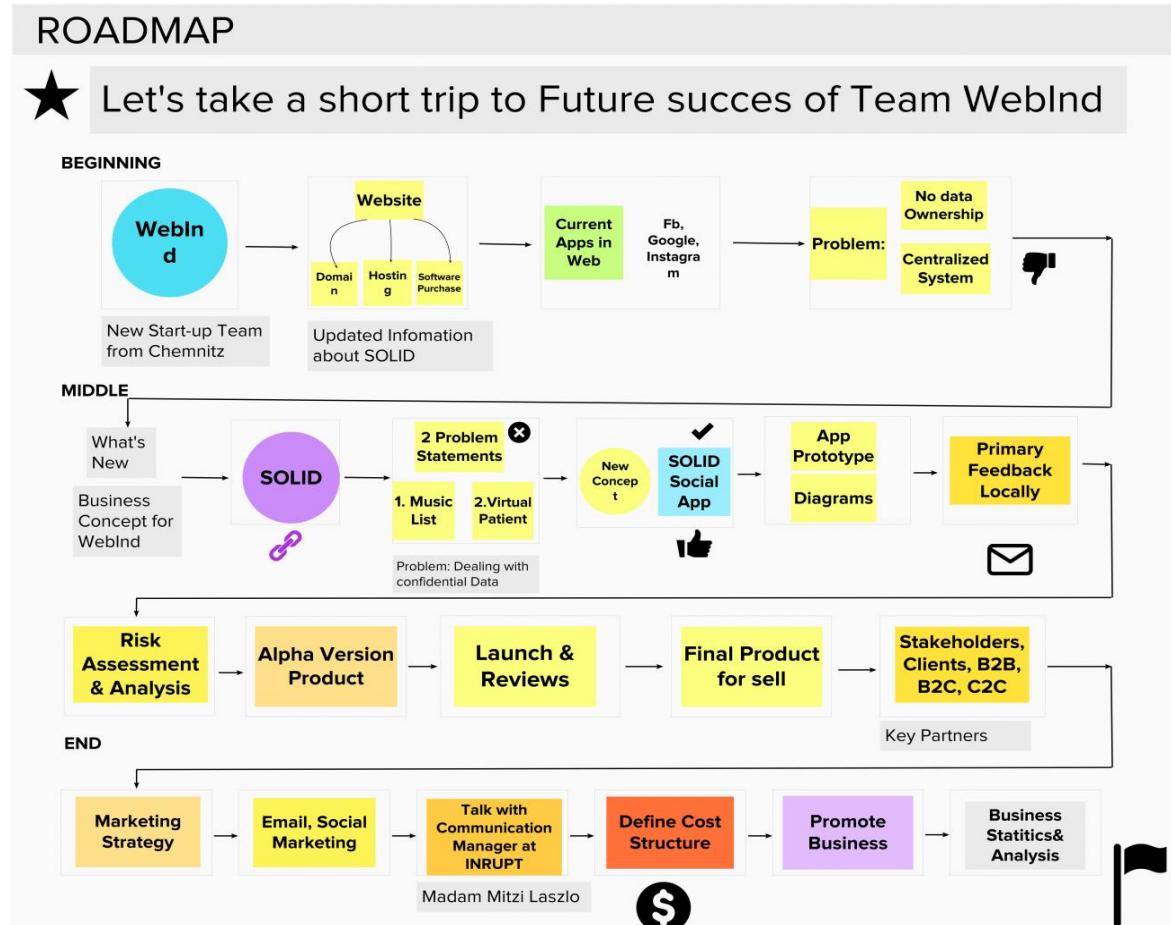


Figure 4.1 Road Map

The main aim is to provide true data ownership with linked data. In order to transfer this problem to real-world application first, we need to understand which type of our audience. What is our area to make a new application? Who is an investor? What their needs and what they desire?

We found the social app has many different and diverse type of audience from the different type of domain. So first we have made the prototype from the existing problem and then started to collect feedback from the users. In the end, we got some nice point of views regarding the solid social app. Now we got the idea what are the risks are attached to the existing product and what we can improve to make the product stronger and much better.

After putting some more effort on this app we made α - version of the product to test some more. So we got exactly idea at the end what the people think about the product. From that things, we make a final social app which will be available in future. Next is we will find key partners(Stakeholders, Clients, B2B, B2C, C2C) who are really interested in this modern web. We have also started dealing with a promoter like Prof.Dr.Eng. Martin Gaedke. After 100% complete the product we will also start marketing strategies with social marketing. Finally, at the end promote the business and last but not the least business statistics to improve analysis for success.

4.2 Business model Canvas

Business model canvas is strategic management and lean startup template from existing business model which manages organizational infrastructure, premise, finance and customers.

4.2.1 Key partners

4.2.1.1 Strategic

As per key partner concern then we have the main two partners. One is the solid community and another is TU Chemnitz. Other key partners are stakeholders, clients.

4.2.1.2 Joint Venture

Our experimental or testing partners are also same as previously described Solid Community and TU Chemnitz. In future also may be other people will be engaged.

4.2.1.3 Buyer-Supplier

Startup promoter: we have startup promoter as solid community people who are really interested to move forward with the latest modern and decentralized web.

Prof. Dr. Eng. Martin Gaedke: One person who is responsible for selling the minimal viable product to the clients.

4.2.2 Key Activities

4.2.2.1 Problem Solving

Using the latest framework and methodologies such as design thinking, HCD and Agile we are understanding the problems. What are the aspects attached to the product? We understand what people need and what is desirable. Scrum as a self-organizing team for developing the projects. Applying different strategies to solve tough problems by using a diverse cultural team who have several kinds of thoughts and mind map to solve query very quickly. Generally from the startup of the project first we find out the problems. Afterward, we have applied Hear Create and Deliver framework to understand the problem. In the next phase, we make design thinking to find out which is the best solutions. By building a prototype with a professional tool we can easily understand the flow of the project to provide a fast solution. Next phase is to make a product by doing the analysis.

4.2.3 Key Resources

To make successful business key resources are most important in this context. We are focusing on two major criteria

4.2.3.1 Physical

- product backlogs:

To complete the task in the team we need selected product backlogs. From this product which has most priority will move first in the team to reach our milestones.

- meetings:

After finish, the tasks from the team at the end of the day a small discussion meeting will be held. The main theme will be what is done so far and what will be a new idea or strategy in the next phase. These things give an idea in which direction the product is moving.

4.2.3.2 Human

Human resources are a major part of the development lifecycle. If anyone wants to be a success in the business field that should be able to accept challenges with innovative strategies. A leading person should have a positive attitude and motivation towards the work. The person should also be adjustable with the new team and client members. To deal with this we have given more importance to the individuals. The person should be intelligent to take quick decision and also be able to accept reviews from the individuals.

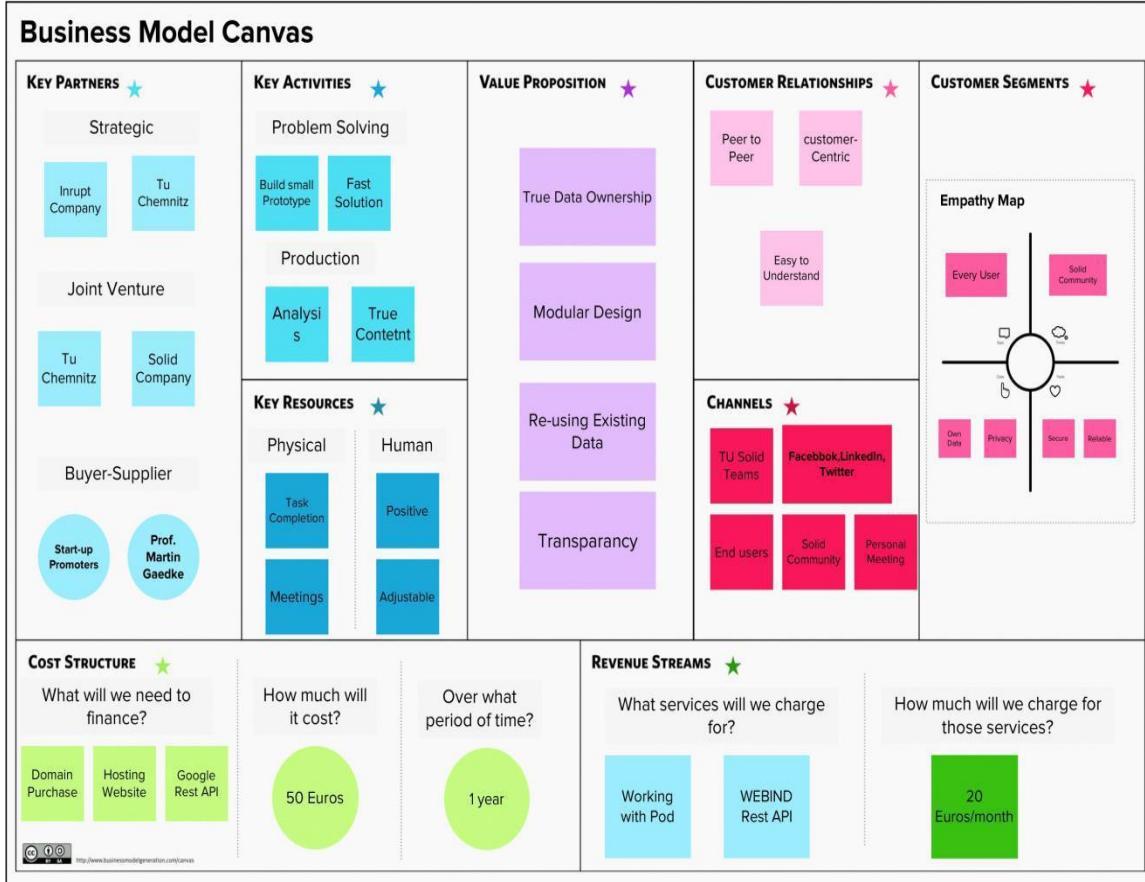


Figure 4.3 Business Model Canvas

4.2.4 Distribution Channel

We have Two most Important channels for our Business, That is Website and Email Marketing. We want True Feedback from our Customers. Sometimes on Social media Feedback are not relevant with our concept or they will give because of Personal Relationship. We think Email is the Proper and Professional way to interact with our customer. The advantage of Email will be that, If we have more email ID then every time we can share our knowledge and Information Regarding our Product. We do not need to give extra effort again for collecting the User Data.

After getting Product in our hand, we will surely publish the visual idea in our Website. So users can see and feel the concept. Maybe we will Provide some Demo for trial but not Compulsory. If they are interested about the Product, then we will have more discussions about cost and selling. We can give our Product by online Services.

Solid Teams from Technical University of Chemnitz are also main Channel Distributors for us. We are sharing our thoughts and ideas on social media like Facebook, Twitter, LinkedIn.

4.2.5 Customer Segments

Solid Technology is very big Concept. It is for them who are more anxious about Data Violation and Data selling by Big Companies. Solid Community is very Important now for us because they Provide every Information, that can help anyone.

We are planning to meet Communication Manager at INRUPT. If we get any feedback from them, that can motivate us to work extra.

4.2.6 Product value

We will have social app. we will provide authority to access data, you can share and organize content using one platform.

4.2.7 Cost Structure

We are in development phase. As of now we will have casting, consulting and advertising cost.

4.2.8 Revenue

For successful business, revenue is most important part so we planned good monetization and revenue strategy. It's as given below:

step 1: Define your vision

We have already made our vision and mission, and we are on the same track.

step 2: set your goals & objectives

we have planned short term goal for 12 months like , we cracked the thing and make minimum viable product, then do medium term and long term goals for 5 years. we are targeting common users regardless of age.

step 3: Define unique selling propositions (USP)

Solid Ecosystem is already different from the crowd and our product within solid framework will be extra thing for us. we will give sharing and organizing features freely. customers can share the moment and business stakeholders can earn by our 3 revenue strategies, which described further.

we are doing Marginal scaling, targeting the web market, creating awareness about our product and new era of the web. we are getting leads and inquiries, making pain clients. we will reach 1000 customers in january via social media, cold calling, SEO, Facebook, Google ads and Email marketing. we are now working on customer experience, promotions and making actionable landing pages. we are constantly improving business and doing work in short time.

step 4: know the market

we had great idea but didn't know about someone, so we did competitor and swot analysis. as the market place is huge and it can sustain multiple business process.

Step 5: Identify product customers

There are thousands of options for each and every product to find out the customers relevant to the product. The main focus should be what your ideal customer wants. In our case, we have different kind of audience, many types of the group by age, multiple organizations by their profession. For example, we know that nowadays people are using social apps for communication because it is one of the best ways to connect people from anywhere from the world. Social apps are used for entertainment, for sharing the best moments and events which will be held nearby location. So, we are thinking we have a large number of users. We are focusing on all types of the member for Solid social application. It is really tough but interesting to find out exactly what customer needs and what is a desire in the context of the product. Sometimes we are assuming the product is satisfying all the features whatever customer need but in reality, it happens opposite from them. In this context making several decisions makes your product successful in the useful area. If the product is successful, then your business will be successful. We are focusing on the most important areas such as to provide some great features in this application which will make sense to use by a large proportion of customers. By analyzing in the specific area, we can grab customer's interest and stop wasting energy on the rest. One best way is to put your feet on customer's shoes and think what can be better for them to choose every time the same product. The solid social app, which will transform the way how we are connecting right now in the social apps. We have found some nice and awesome features like sharing events nearby location and each and every person can engage with that feature. We are improving this idea in depth to give some benefits to the customer which we have not in past with social apps. How we are improving we have mentioned these ideas in very depth with the prototype and product and service description.



Step 6: Research the Demand for the Business Plan

Research may send you a lot of unnecessary hard work & troubles with stress on your head but by ignoring this maybe we could be missed a lot of actionable information. Market research is not only important before starting up your venture but also it has extreme importance for managing and scaling your business. So, how do you exactly research for your startup well for that we have two kinds of research which are mentioned here.

1.Primary Research:

Primary research is done by DTAC relations with surveys, posts on social applications, joining by the local communities, finding some experts in this field who are interested and by doing questionnaires based field research. We can directly interact with our targeted audience to know their preference and how ready they are to buy our product.

This survey can give a lot of Daniel and detail information. The major problem with Primary Research is it is time-consuming and also very costly. It is also a propensity to give biased information If research is not held properly especially if the sample study is not diversely divided enough. However primary research will come when we are doing product launch as well as service launch because we can use sample study plans as a first set of the customers. While planning and understanding feasibility of the startup we have focused on following criteria.



Figure 4.4 Primary research

However we are managing our startup, We must have to do regularly or periodically research.

Mystery shopping:

This is done by team members as well as individual to pretend to be your opponent customer and inquire about the product and services and gather a lot of information about competitor's strategies pricing and operations which are generally not available in public region. We are focusing always on current trends in this field to remove disruption. We always focus current customers to understand more regarding the product.

2. Secondary Research:

Secondary research through coalition and synthesis of the information that is already available. This kind of things can be white paper reports of researches, doing from home, Library or Government Sectors. It is reliable for planning purpose according to the market.

We have defined a general structure for research which is followed by here.

1. Research scope
2. Research plan
3. Data collation
4. Data analysis
5. Market insight

Find out demands before investing in the new Business. The basic rule is demand should be more than supply.

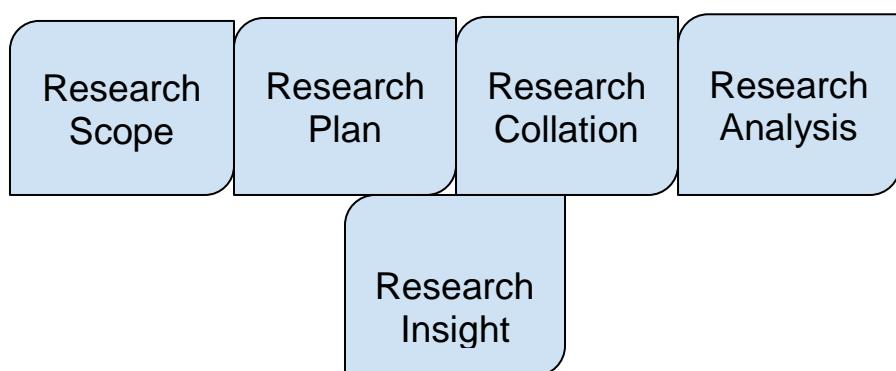


Figure 4.5 General structure for research

1. Research Scope:

Justify or explore the area in which we want to do research. If we know the boundary or edge we can fix out our mind and goals within the particular region. We are working with solid so, we have interested in this particular area where how the technology works, how are the current trends, how is the future.

2. Research Plan:

Research plan always consists of starting points and theoretical basis of the research or previous research. A good plan must have relevant topics, background, execution, objectives, data analysis. One should always define subject areas, selection of an appropriate approach and some references from the back researches.

3. Data Collation:

Collation of data specifies how data is ordered and managed by comparison. It concerned with the ordering items of the information, usually based on the form of their identifier.

4. Research Analysis:

Analysis means to break a topic or idea falling into its parts in order to inspect and understand it in depth and to restructure those parts in a way that makes sense to you. In analytical research, we do research to enhance a specialist on a subject so that you can restructure and present the parts of the topic from your own viewpoint.

5. Market Insight:

In this current era, most companies have their large amount of data from different sources and applying different strategies by providing several kinds of services. Now competitors will come in this scenario. Insight means understanding the changes which make a difference for decision making, thinking and taking actions as per demands in the market.

Step 7: Setting up Marketing Goals

After finish research on solid related posts, articles and over audience now it is time to set marketing goals. Now at this moment, several questions will come in mind regarding product which is mentioned here.

1. How your product would look like?
2. What it will cost?

3. How you will distribute it?
4. How you will promote it?
5. How many customers will be engaged with this product?
6. What will be your product development strategy?
7. What will be the price margin?
8. How you will deliver promotion plans?

To give an answer in a few lines for these questions are not sufficient. We will answer these questions after understanding the marketing strategy section.

Step 8: Defining Marketing Strategy

Now we have our marketing goals and we need to achieve them. For marketing strategy, we have also some questions which must be fulfilled to deliver product better way.

1. How many products do you need to produce and sell?
2. What profit margin will you decide to get your desired revenue?

After gathering all questions at a point we have prepared all business plan for the product as Solid application which is followed by this answer.

4.3 A quick look on rapid fire up round:

We have three major areas in which we want to move forward to make the product more and more successful over by terms.

1. Launch
2. Press
3. Channel Testing

4.3.1 Channel Testing

What we want to do is we want to go from the reverse order and test our channel first. By optimizing the price of the product and the marketing messages then after we will move on the press and at the last launch. To understand more in-depth fo how to do marketing we have used sell starter application which is open source crowdfunding platform. Afterward, we have created crowdfunding site but this time we have divided this plan into TEST-A and TEST-B.

We use several brainstorming like putting the title on test A like “social app with your true data ownership” and on test B “social app with your own private storage”.

As we have thought few people are engaged with test A and few people are engaged with test B. Now we got the idea which version should be better to configure more out and to make much better. Crowdfunding says if you can build crowd over 5000 people then we have the assurance that we can build this product. Now next phase is to set down the price for the product.

One way is to decide minimum value such as 10\$ per/month for every user who can access all the features. But in this case may be we will decrease the population for the app. Another way is to provide services per the visitors like 25\$ with a fixed number of visitors for your app. Sounds like good but it is more worthy for visitors. At the end of the day, the question is who knows how your app will convert 25\$ for product owner as their expectations. One problem is how much they are paying we don't know but if we provide credit card then we can calculate how much they are paying per users. One of the best way is to provide free access to all the visitors who are in order of list. At this moment we have optimized our message and price.

4.3.2 Press

Now we can focus on second phase which is Press. It has two keys which are mentioned here.

4.3.2.1 Relationship

If you have more relationships with the writer, blogger and reporter it will impact more influence on your product to do marketing in a broad area. The reason to chase this people is if they know more about you, they will write better about you. Second reason is if you need traffic on your application you need a platform from where people will get to know about your product and services in meaningful sense.

4.3.2.2 Do all the work

Not only textual representation but also we need graphics and visual representation in context of blogging to engage more visitors. As we know nowadays people are lazy to read or finding not time to spent on product details. For these people this things will be attractive and sufficient to pull them to involve interest.

Google News this is website which aggregates the news content around the world. Actually, they have an API(Application Programming Interface) to search world wide with any particular topic. Our main target is to fetch crowdfunding aggregator by collecting information from indiegogo and kickstarter and many more. Now put all them together on Google News and ask about crowdfunding which is written by them. Approximately more

than 700+ articles we found from this app. In addition, we need now contact details for those authors and publishers of these articles. Mechanical Turk, a website where people work for small tasks. By investing little bit amount of money we can get contact details very easily. We got more than 300+ authors with their email id from this investment.

Now we think to build press kits which is blogpost with password protected and resides we have infographics about launch, bio of entire team, screenshots of the product and many more stuffs. This is important to mention why we are building our app in this context. Blogger and reporter really likes to talk about founders of companies and what their motivation is to solving a critical issues.

Another way is to connect Web Summit, a technology conference where all the fortune 500 and even small companies will come and put their ideas in front of investors and clients.

4.3.3 Launch

Second phase is finished. Now in first phase, it is time to lunch our product with different different platform such as social media(Facebook, Twitter, Linkedin, Instagram etc.), classifieds of whole Europe, Communities etc.

5 Financial Terms

When you start up business it is necessary to make statistical analysis over invest for every month and how long you can survive with your invested money from business account.

5.1 Crowdfunding

Finding investors and clients from different platforms and convince them to take interest into your project. We are focusing this platform in next few months.

5.2 Bootstrapping

Using your own money in the company as lean as possible to really prove efficiency and status of profile and what we have promised to the customer to make them true. We are going right now with this approach.

5.3 Return on investment

Of course, profit matters when we look inside the business area. We are investing a very small amount of money like 100\$ but a product which will be generated which will sell in thousands of dollars.



6 Revenue Generation

One of the most important part for making successful business is to find out monetization strategy and generate revenue model for income. We have seen those people who have ignored revenue models and at the end they have made sustainable revenue model for keep themselves into the market. Remember every time by funding and by investing money to your venture will be not possible easily. If you see many E-commerce, website building, mobile app development and even software companies are struggling now a days due to bad or very poor planned revenue models. We believe that your primary source for fund should be from our paying customer. If we can't make that then we should go with funding.

There are several factors affecting to the revenue model.



Figure 6.1 Factors affecting to the revenue model

Now let's look on some Revenue Model Types.

6.1 Production Model

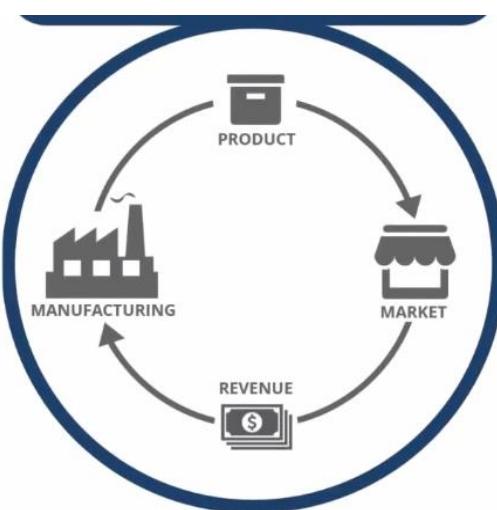




Figure 6.2 Production model

It's a manufacturing model where you manufacture the product and went to the market for selling with different kind of strategies. From that you will generate the revenue.

We are producing solid apps and pushing it into the market as per the demands and from that we will generate revenue.

6.2 Rental Model

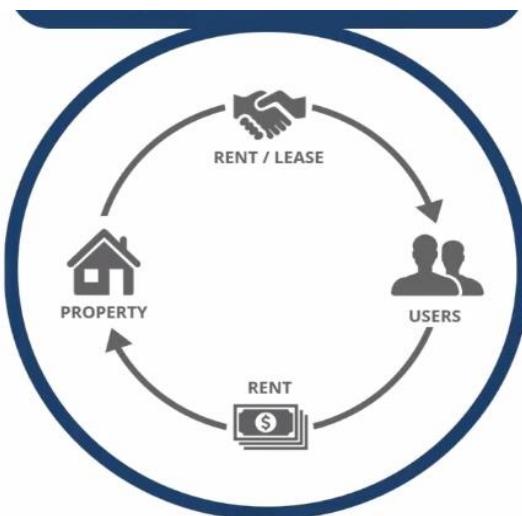


Figure 6.3 Rental Model

Here we have some private properties such as web domain, website area for the advertisement and server space which we will offer to clients during the peak hours. We have also some software services and APIs which can be accessible or temporary leasing out to the people as per their demands. From these things also we will generate revenue in the future.

6.3 Advertising Model

This model will earn money from the advertisement platform.

We are currently earning money from this advertising model to run our business very efficiently without any problem. What exactly we are doing, we went to advertisement platform such as Google Adsense and Admob for monetization.

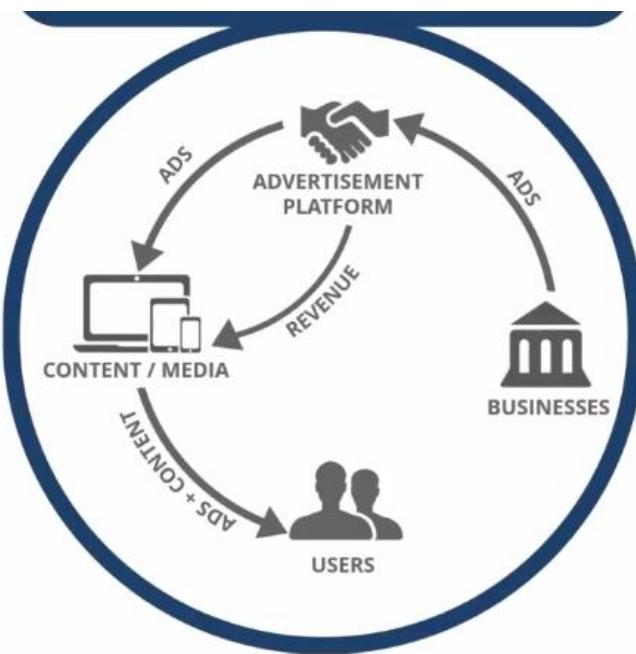


Figure 6.4 Advertisement Model

We have made our blogger website to publish our news and articles regarding latest technologies with whom WEBIND constantly updating and manufacturing new products. We will add Google AdSense in next few months while our blog website will be interacted in large proportion of people and it will generate revenue when person will visit this ads. We have also made Android Smartphone application for the clients.

In this application we have approved Ad mob account for starting up monetization. When people will interact with this app and visit the pages which is inside it has banner and interstitial ads. When visitor click on advertisement it will generate revenue.

6.4 Licensing Model

Companies are doing inventions and new products and for that they will generate license and copyrights.

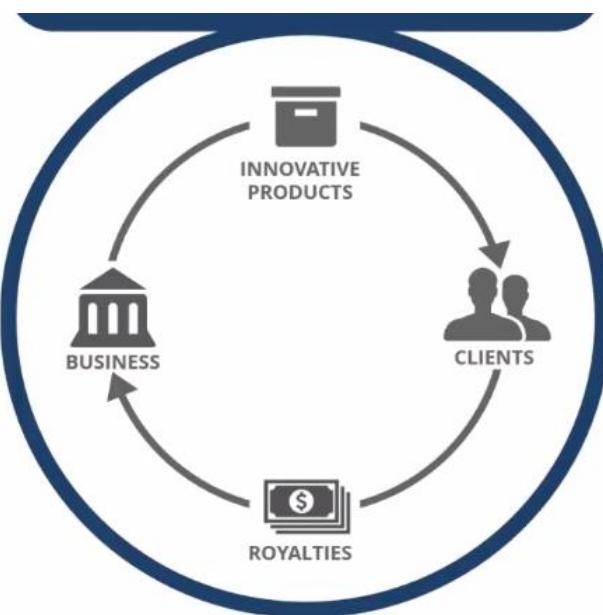


Figure 6.5 Licensing Model

After copyright these product will be used by other clients and for that they have to pay for royalties.

Part II Products

Implemented Product

7 Introduction

7.1 What is this?

This product aims to bring people a decentralized way for photo sharing and event organizing. People can use whatever apps they want to communicate with each other during an event and easily post photos no matter what kind of social platform they use. What's more, this product allows people to create and search event across different social apps.

7.2 Who's it for?

This product is for anyone who has a social need for photo sharing or event organizing. We developed a platform within solid concept to help people from different social platforms and apps to connect with each other and to share data with each other.

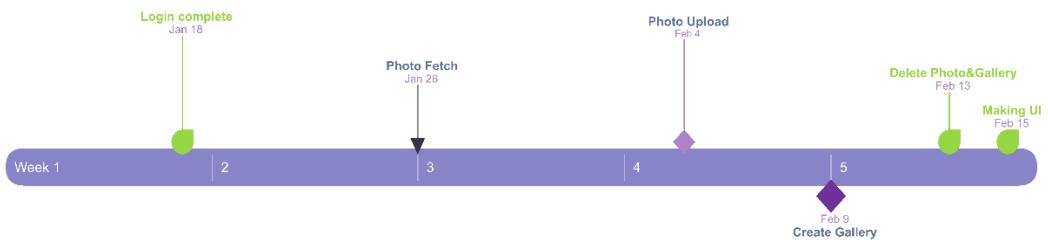
7.3 How it works

We follow agile methodology and combine design thinking in our practice. Base on research, we defined a workflow and applied it to develop our product.

1	2	3	4	5
Personas /Interview	Empathy Map	Project Rundown	Journey Map	Ideation
6	7	8	9	10
Storyboarding	Hills	User Journey Map	Paper Prototyping	Experience Roadmap
11	12	13	14	15
Prioritize Releases	Product Backlog	Planning Poker	Sprint	Retrospectives



7.4 Milestone for February



8 Problem Statement

8.1 User persona

[User Persona: Alice, the event attendee]



Alice likes party. When she goes to a party, she would like to take many pictures with her friends. However, in most cases she has pictures of others within her phone, yet her pictures were taken by others camera. To exchange each others picture is an annoying process for her. Because she has to talk to her friends one by one and find a third-party service (google drive, facebook, dropbox etc.). Some times, she may not know the one who took her picture at the party so she need to add him/her to her friend list first. This is also a bad experience.



Create your own at Storyboard That

Figure 8.1 Persona: Alice

Empathy map:

Thinks	Sharing photos with people who attended same event is difficult.
Sees	Many photos were taken by other person.
Feels	She wants the photos of another person.
Does	Add friend first, and then use Google drive, Dropbox, Facebook etc.

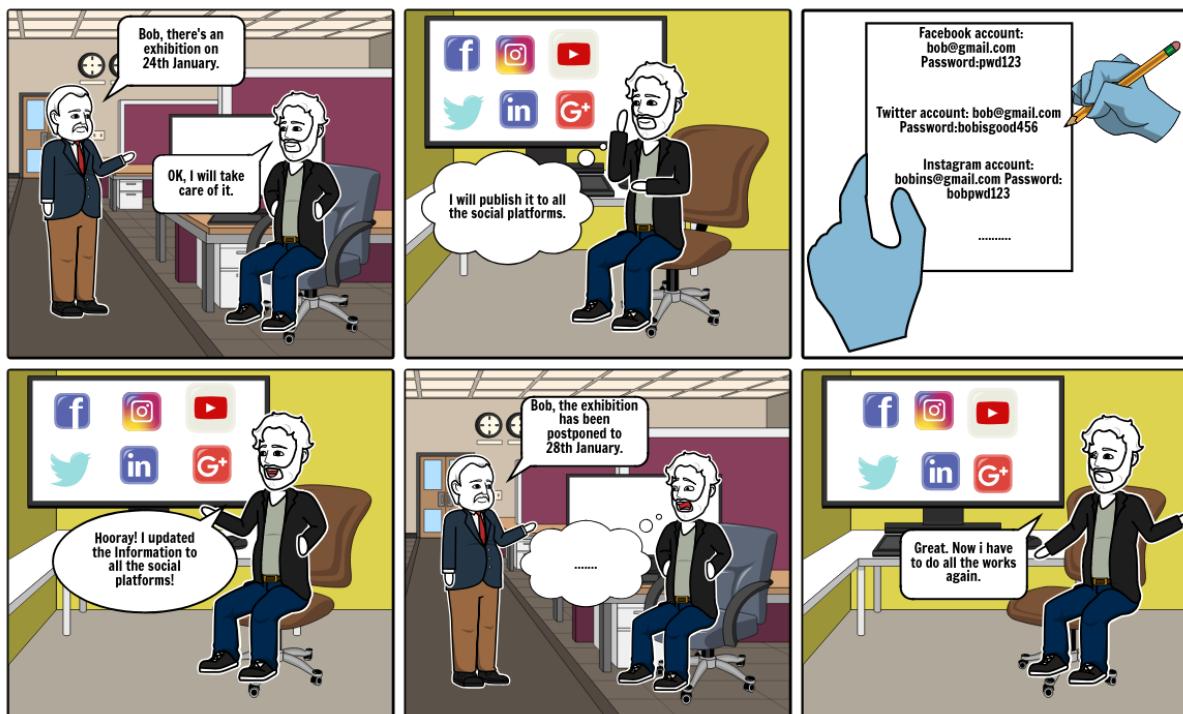
[User Persona: Bob, the event organizer]



Bob is an event organizer. His job is to organize events like exhibition and fashion shows. Recently, he met some problems when scheduling such events: Users tend to use different social medias. In order to cover all the target audience, he has to publish the event's descriptions, pictures, details again and



again to every social media platform. Sometimes, he may need to update new information about event changes. What he can do is to repeat the former works.



Create your own at Storyboard That

Figure 8.2 Persona: Bob

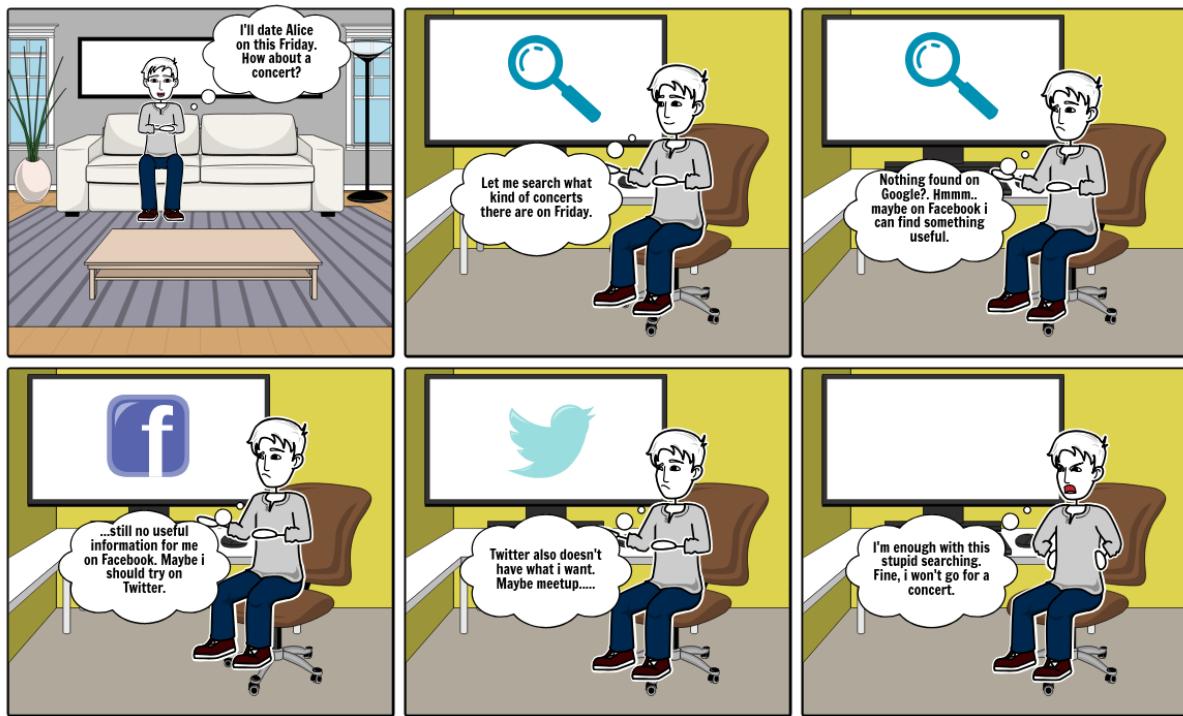
Empathy map:

Thinks	Scheduling and manage events is hard and annoying.
Sees	People use different social media platforms.
Feels	Too many social accounts to manage and publish.
Does	Manually publish and update for every social platform

[User Persona: Charlie, the event interested person]



Charlie likes music. He wants to find a concert nearby. In order to get all concerts, he has to search on every social platform he can use and register an account for every platform. Next time when he wants to search for a new concert, he has to search again on each platform.



Create your own at Storyboard That

Figure 8.3 Persona: Charlie

Empathy map:

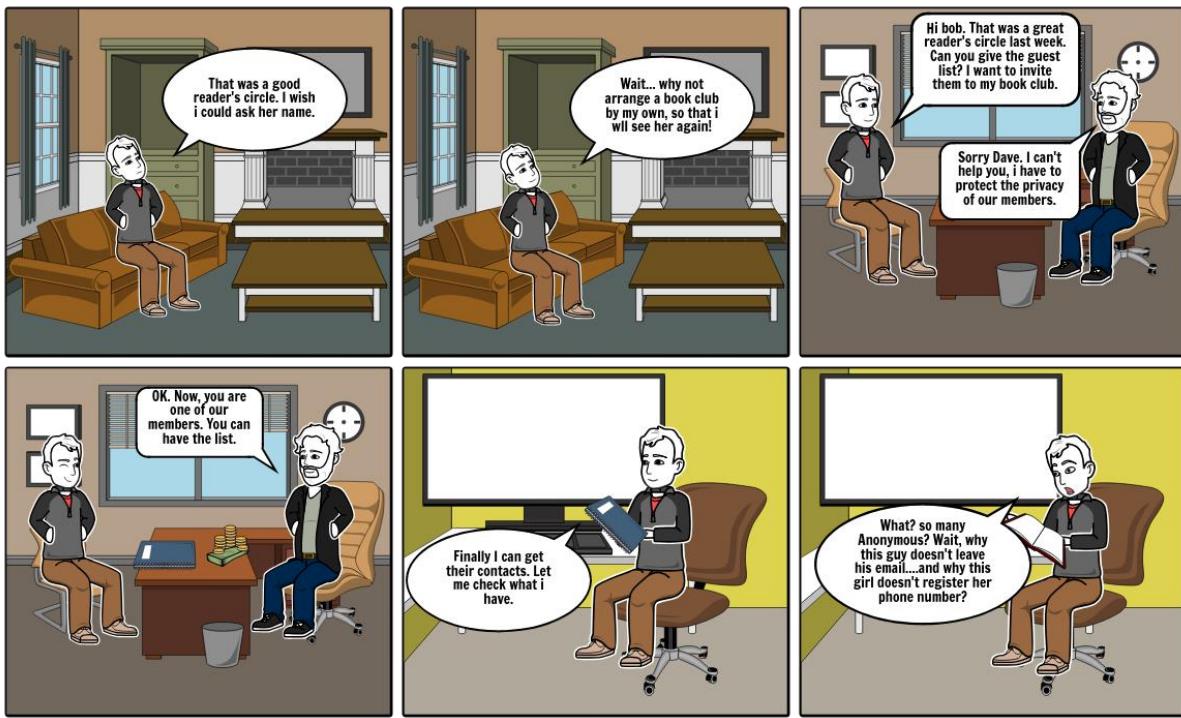
Thinks	Searching events is annoying and inconvenient
Sees	Events are published on different social platforms.
Feels	Too many social accounts to register.
Does	Search on each social platform.



[User Persona: Dave, the event attendee and organizer]



Dave is a book lover. Last week, he attended a book club arranged by bob. This week, he wants to arrange his own readers circle and invite all the people who have attended last week. Here he got problems: In order to reach all the readers he contacted bob. But bob can't give him the readers information in order to protect readers' privacy. Somehow he reached another guy and got the guest list. Even though, he found some readers are anonymous and left no contact information.



Create your own at Storyboard That

Figure 8.4 Persona: Dave

Empathy map:



Thinks	Connecting people who has attended event is hard.
Sees	Organizer won't give the guest list in order to protect privacy.
Feels	Sad, his purpose is good but he got bad feedback.
Does	Reach the organizer, if he got the guest list, call them one by one.

8.2 Problem scenarios

Problem Scenarios	Current Alternatives	Your Value Proposition
Sharing photos is difficult for people who attended same event	Use third party services (Google drive, Dropbox, Facebook etc.)	An event management platform which people can upload their photos on the pod and let others access it.
Scheduling Events is difficult for people who want schedule the event	Publish and update events to every social platform manually	Publish and update events to one pod and let apps access it.
Searching on going events at nearby areas is difficult for people who are interested going and attending events.	Register and search on each and every possible social platform	On the pod, data are reused between apps, users can search once and get all information.
Connecting people who has attended event and has similar interest communicating or contacting is difficult.	Call the participants one by one.	On the pod, users can set their information as private or public or partially both. If they want you to contact them, you can easily find them.



9 Journey Map

User Stories:

Epic #1:

'As a event attendee/organizer , I want to log in using different service providers as: log in with custom provider, log in with inrupt.net, log in with solid community, log in without user and password so I do not need to rely on single option'

Story	Notes (general and informal test cases)
provide log in button of application	<TBD>
Pop up child window provide different choices for log in after clicking login button	<TBD>
Choice1: log in with cutom provider.	<TBD>
Choice2: log in with inrupt.net	<TBD>
Choice3: log in with solid community	<TBD>
Choice4: log in without user and password (WebId-TLS Certificate)	<TBD>
Redirect to respective service provider, after choosing one of the options.	<TBD>
Login status: success or denied.	
Redirect to the index of the user	

Epic #2:

'As the event attendee, I want to upload pictures and make available to my friends so I do not need to send it individually who asked me to share the pictures'

Story	Notes (general and informal test cases)
View of existing photos and folders: Viewing options: Option - 1. Thumbnail	



Option - 2. comments	
Option - 3. likes	
Option - 4. reposts	
Option - 5. Categories	
Create a new folder and give a name for it as you like.	<TBD>
Set privilege to the folder: 1. read only permission 2. read/write	
Privilage setting of the folder to be shared would be based on event name.	
Upload the pictures to your Pod from your local devices such as desktop, mobile phone,etc.	<TBD>
Drag and drop files	<TBD>
Show the details of upload / meta data: 1. Number of files / pictures has uploaded 2. Size of upload	<TBD>
Edit photo details: tags , descriptions, related events.	
Select a folder to upload	<TBD>
Success message shows up, otherwise an error message will appear.	

Epic #3:

'As the event organizer, I want to make invitation and send it to the event participants (the event attendee) who are relevant to this event so I do not need to send it individually to the event participants'

Story	Notes (general and informal test cases)
Create an event	<TBD>
Provied some standard template options	<TBD>



Provide option to customize the invitation of thier own.	<TBD>
Post the event URI to the social media--- if event is public.	<TBD>
Set a group to your address book as guest list of private event.	<TBD>
Post the event URI to the guest list.	<TBD>

Epic #4:

'As the event attendee, I want to search events nearby and register for it if it is needed so I would not miss any event which I am interested.'

Story	Notes (general and informal test cases)
Recognize the location - by using device sensor	<TBD>
Ask user for permission of getting location	<TBD>
Input box should ask for distance in km to seach near by events	<TBD>
Input box should ask for keywords of the events	<TBD>
Input box provide voice reconition	
Diplay results of search and rank the results in different categories: 1. Date 2. Author 3. Event name 4. Participant number	<TBD>
Registetation mandate message whould be displayed if it is requested by organizer.	<TBD>
Redirection of registration form should be linked.	<TBD>

Epic #5:

'As the event attendee, I want to get contacts of other attendee and ask whether he / she interested in similar other events and or make friend'

Story	Notes (general and informal test cases)
Retrive the WebID of attendee based on name search.	<TBD>
Input box should ask for First Name to seach the attendee	<TBD>
Input box should ask for Last Name to seach the attendee	<TBD>
Send messages by using chat box.	<TBD>
Provide option to add this person in your address book.	<TBD>

10 Ideation

10.1 Stakeholder analysis

As we mentioned, solid is not ready at moment for the use of massive non-developers. In this phase, our project can not be implemented to the real-world market, yet we can define our potential customers and stakeholders and get ready for the future.

The stakeholders are:

- Those users who has a need of scheduling event and sharing photos
- Solid community and inrupt who promote the solid project
- Ourselves who dedicate to this project



Figure 10.1 Stakeholder Analysis

We have applied the SWOT tool to analyse this event management project and got some hypothetical output shown as above. The strengths and opportunities are quite clear and obvious. About the weaknesses and threats, we saw that our project has simple functionality thus easy to be duplicated by others. In the future, we will take advantage of the user true data ownership to provide more apps and make these apps communicate with each other to improve our user stickiness. Furthermore, as solid and we are both newcomers, there are no existing templates to refer to. This is our challenge and also our chance. There must have other risks and threats we don't realize for now, thus we will keep exploring and updating.



10.2 Problem analysis

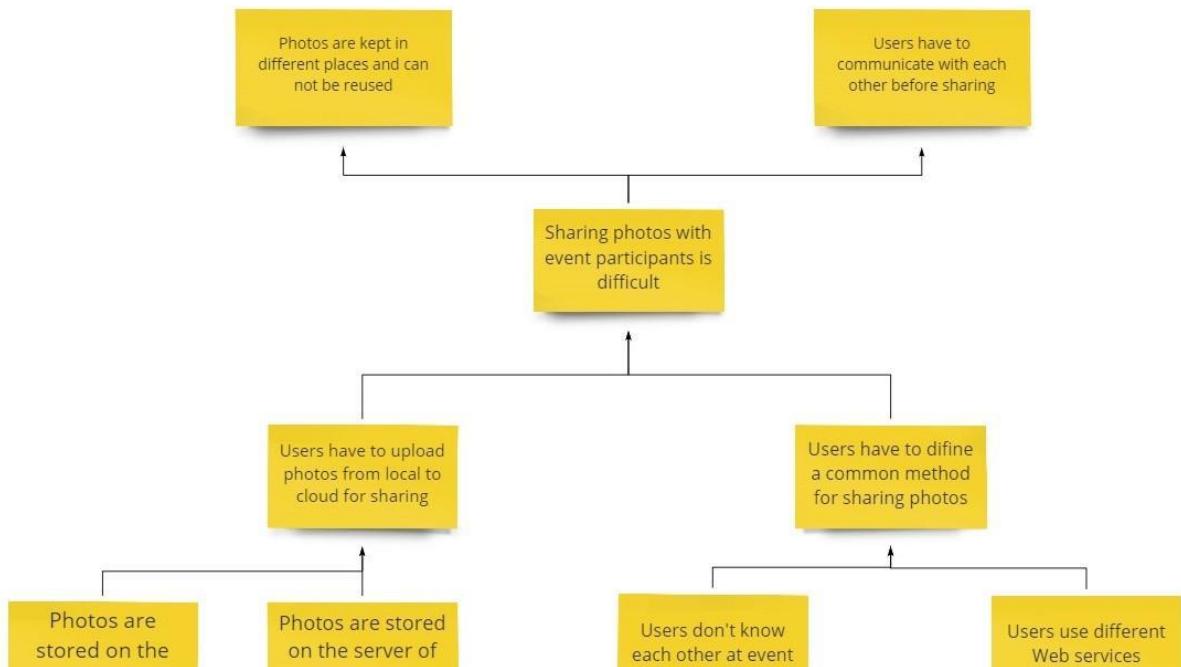


Figure 10.2 Problem Analysis

When people attend an event such as parties. They will most probably take pictures to fulfill their social need. But in most cases your photos will be taken by others, to exchange the photos with each other, usually you need to first upload your picture to the cloud (google drive, dropbox, etc.) and then share the link. Sometimes, you may not know the one at the event, thus you have to get his/her contact information first, and then define a service to use. This is inconvenient and will lead to data redundancy.



10.3 Objective analysis

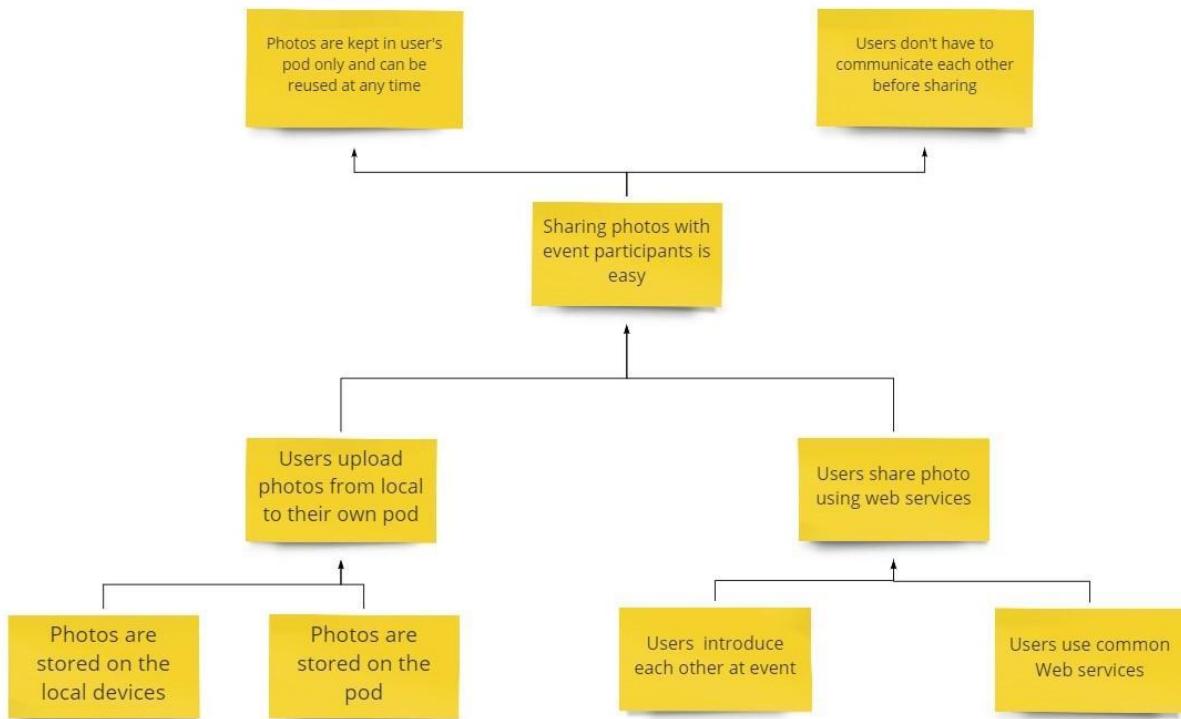


Figure 10.3 Objective Analysis

There are two ways to solve this problem. One is using solid, users will publish photos to their own pod and set the permission so that others can access it using whatever application they want. Furthermore, the participants can retrieve photos and events nearby based on location. Second, setting rules for participants before the event. Everyone leaves their contact information and uses same service for sharing photos.



10.4 Strategy analysis

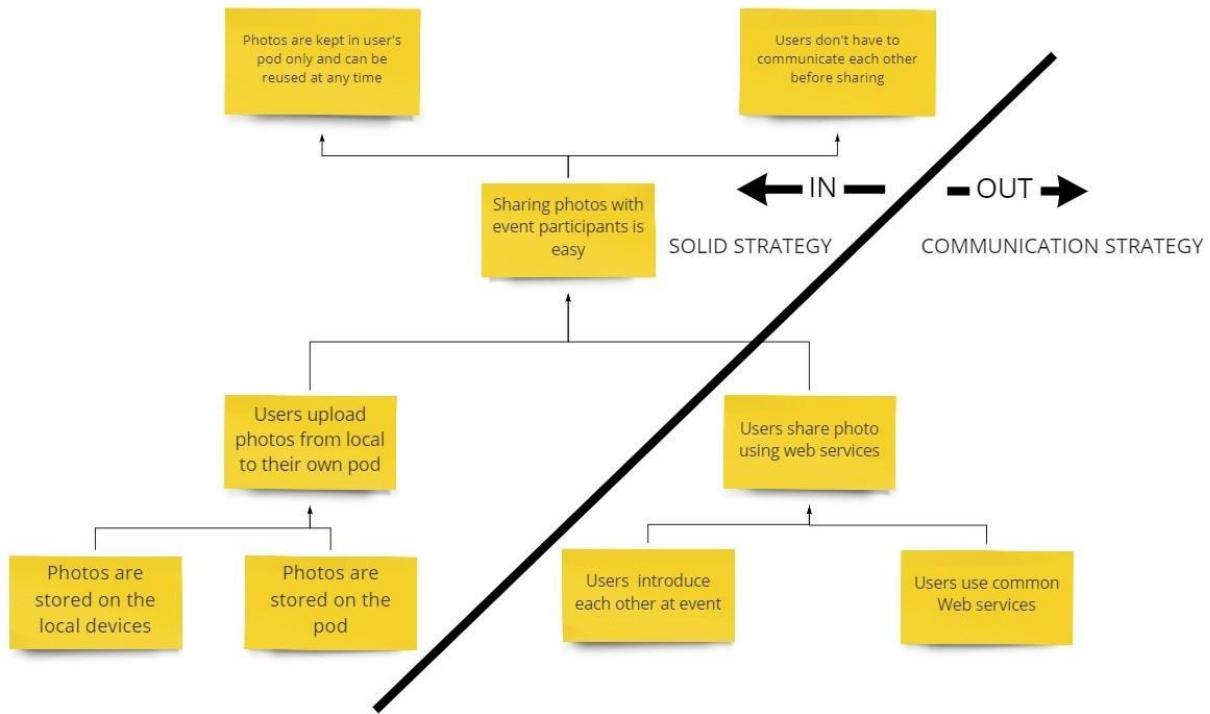


Figure 10.4 Strategy Analysis

We will choose the first strategy: using solid. Because the second one is out of our control and not a wise choice.

11 Hills

The first draft for a hill for one of our personas named Alice was:

"Alice can share photos with people who use different apps during an event under just one click."

The second draft for a hill for one of our personas named Bob was:

"Bob can publish and manage events for people who use different social apps using just one account."

The third draft for a hill for the rest of our personas named Charlie and Dave was:

"Charlie and Dave can search event and retrieve event details from different organizers through just one click."



12 User Journey Map

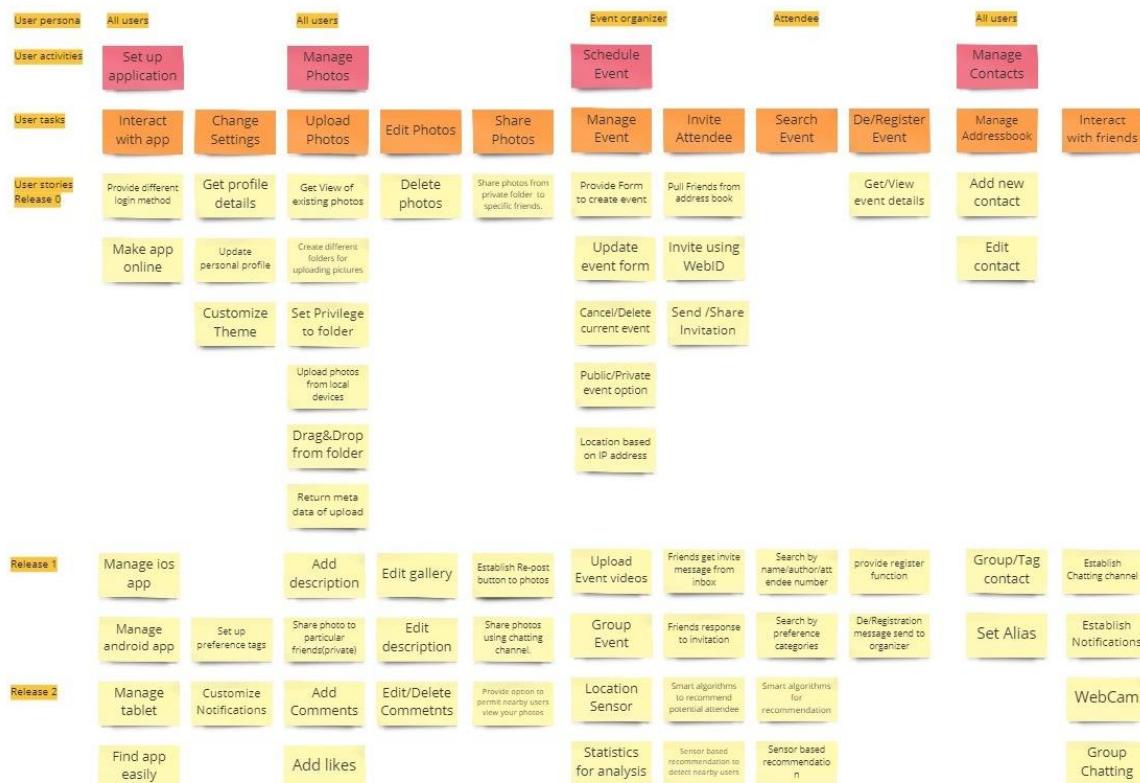


Figure 12.1 User Journey Map

13 Paper Prototyping

The screenshots of user interface (UI) has provided as below. This web application would be having several web pages such as login page, Index page and events etc. This hypothetical UI gives insights on look of this web application once its developed.

13.1 Login



Figure 13.1 Login

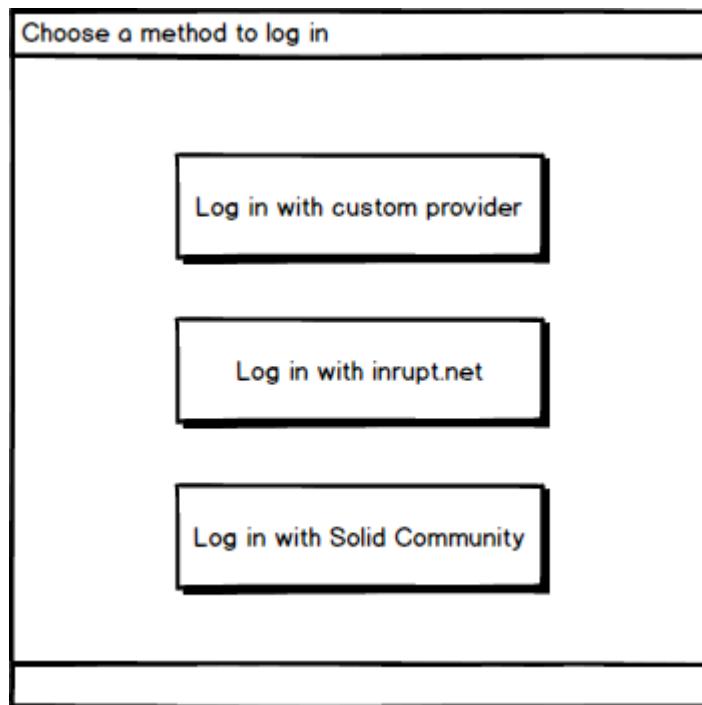


Figure 13.2 Login Method

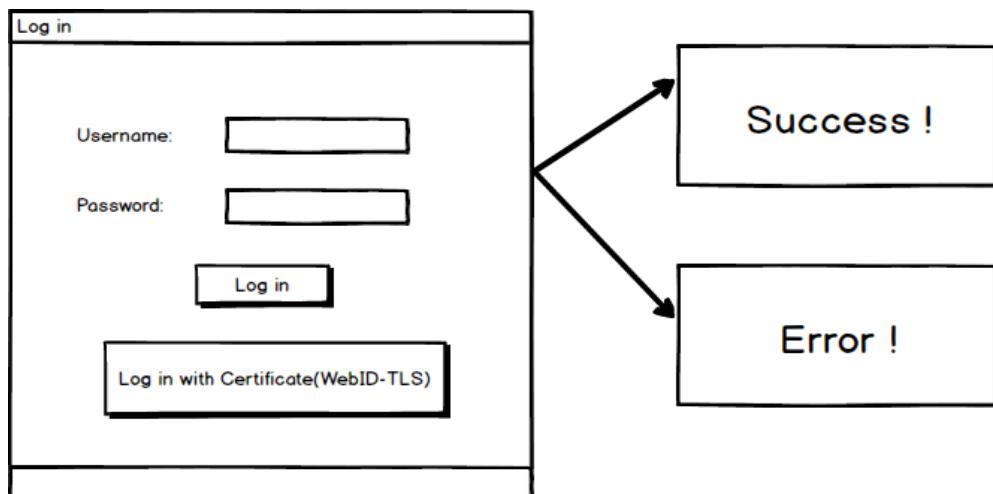


Figure 13.3 Login Return

Users will have different opportunities to login our web app. As we said, our product is a decentralized application. In the future, they will be able to log in with whatever solid pod they want.



13.2 Index

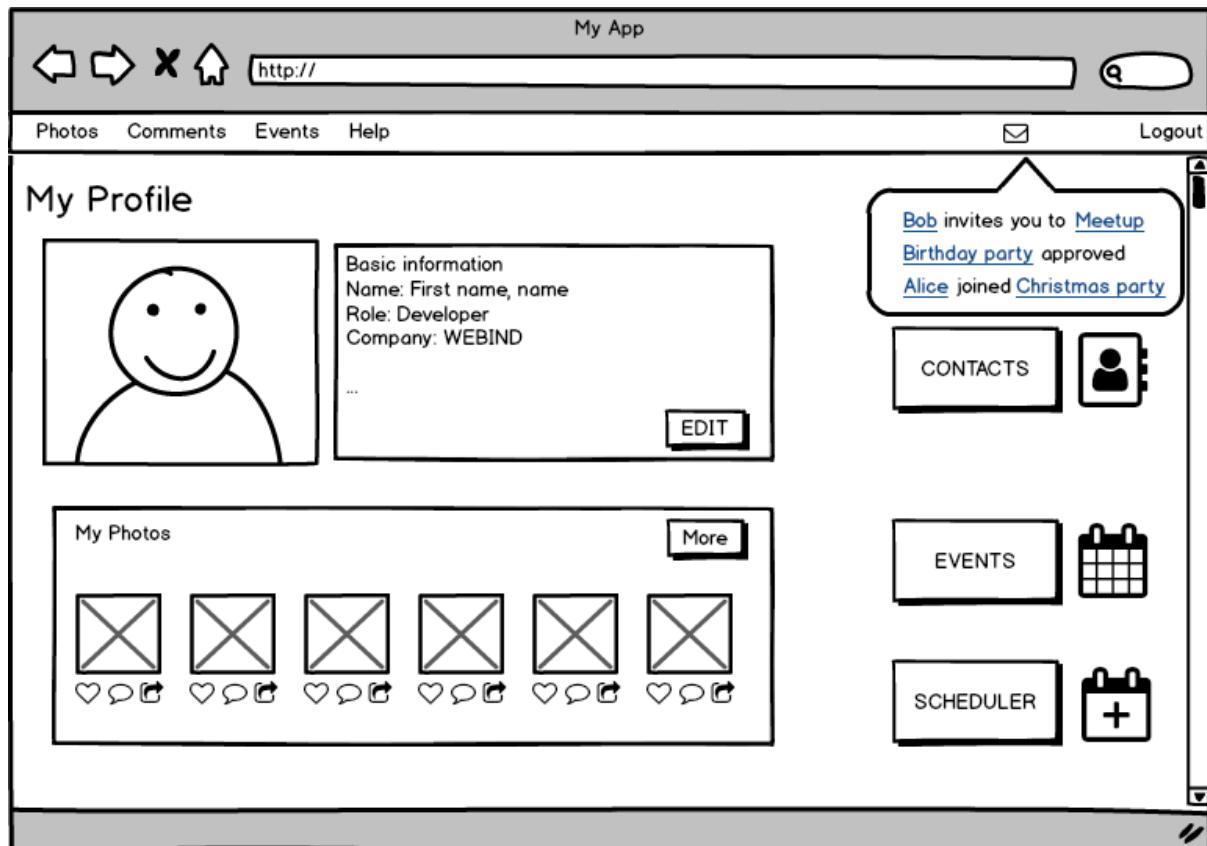


Figure 13.4 Index

After Log in, Users come to their Homepage. Which contains their basic profile, and the Entry point of the functions which we plan to deliver.



13.3 My Photos

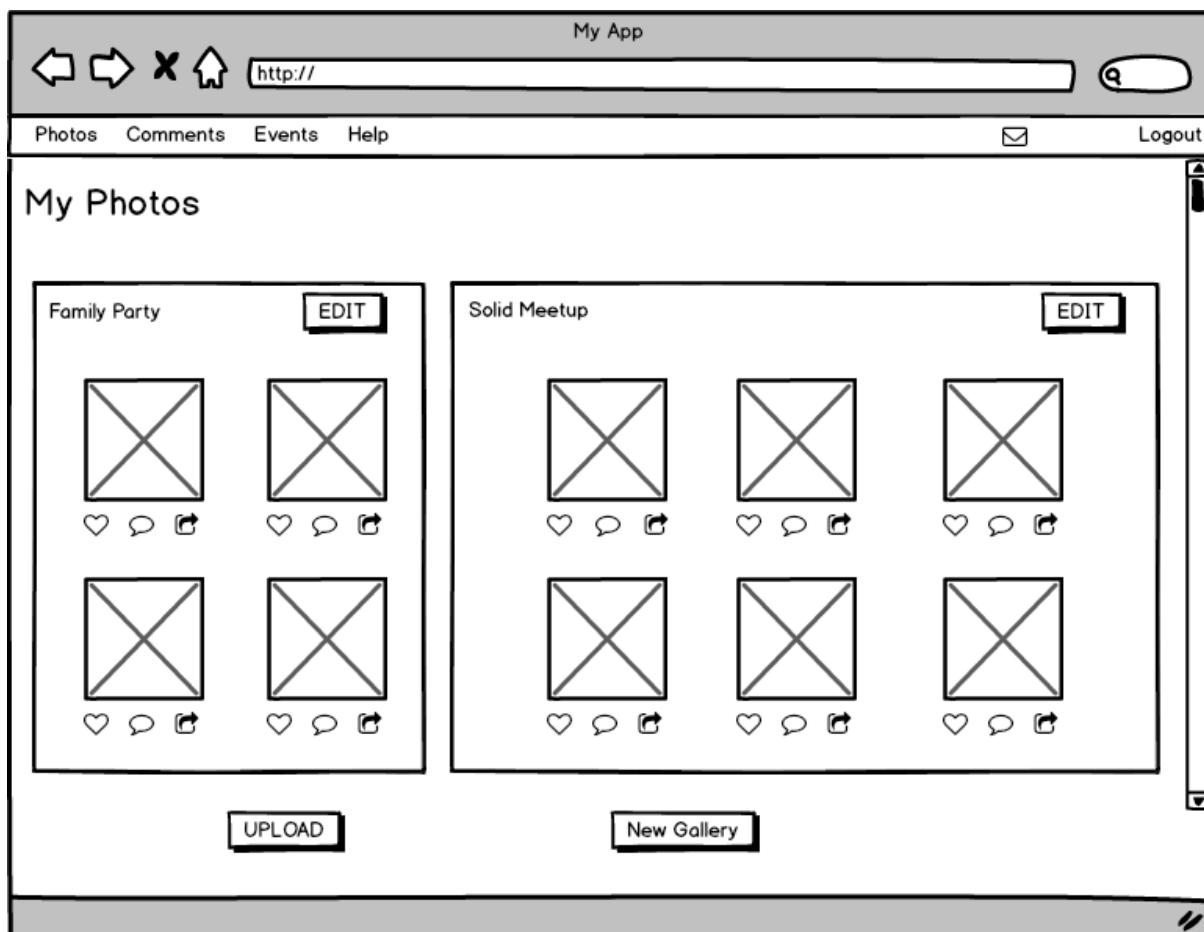


Figure 13.5 My Photos



13.4 Comments

The screenshot shows a web application window titled "My App". The header includes standard browser controls (back, forward, search, etc.), a URL bar with "http://", and a navigation menu with links for "Photos", "Comments", "Events", and "Help". On the right side of the header are a message icon and a "Logout" link. The main content area is titled "Comments". It is divided into two sections: "Received" on the left and "My Comments" on the right.

Received

- Great pic! 1 min ago
- That was dope! 2 hours ago
- Miss you bro. 3 days ago

...
...

My Comments

- Happy New year! 1 min ago
- Merry Christmas! 5 days ago

...
...

Figure 13.6 Comments



TECHNISCHE UNIVERSITÄT
CHEMNITZ

13.5 Upload Photos

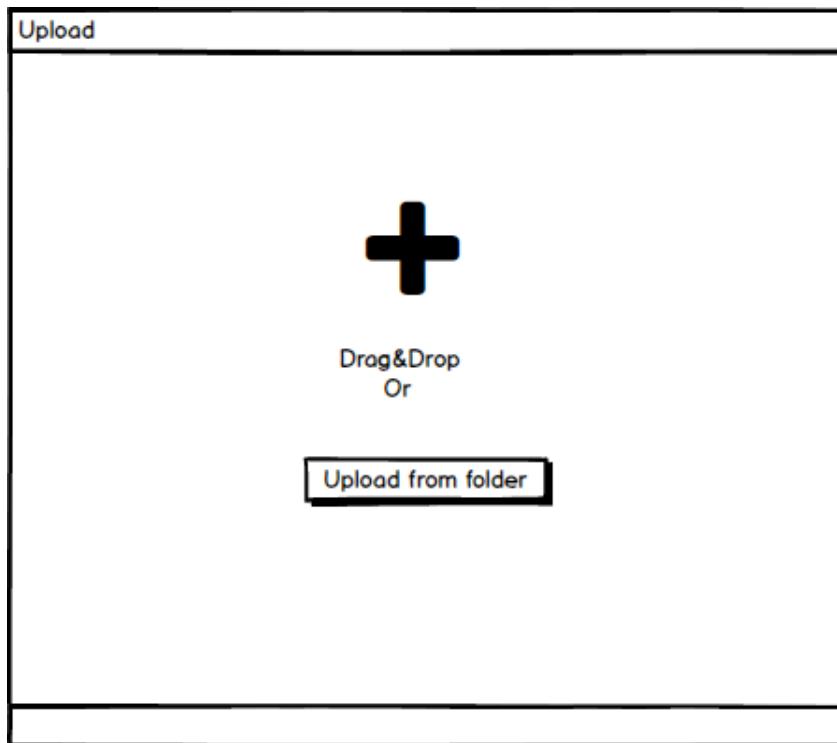


Figure 13.7 Upload Photos

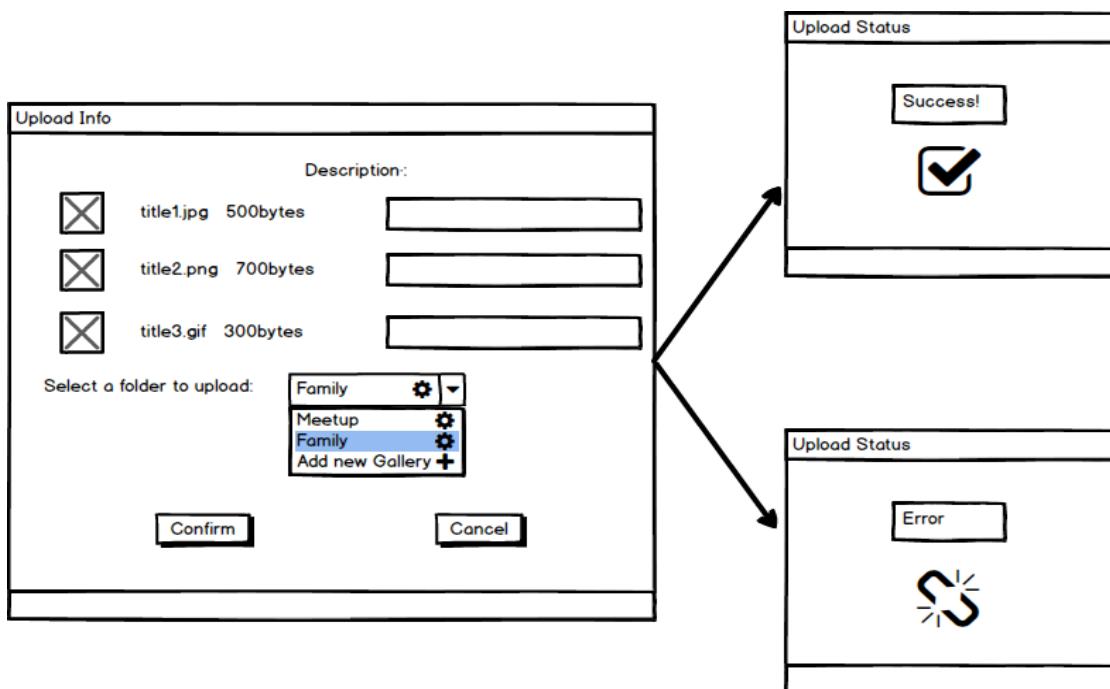


Figure 13.8 Upload Return



13.6 Events

The screenshot shows a web-based event management system. The top navigation bar includes links for Photos, Comments, Events, Help, and Logout. The main content area is titled "EVENTS". It features five vertical columns representing different categories:

- Past:** Contains the event "Sister's Wedding" on 12/12/18.
- Now:** Contains the events "Christmas Party" on 24/12/18 and "Mike's Birthday Party" on 24/11/18.
- Upcoming:** Contains the events "New Year Countdown" on 31/12/18 and "Winterfest" on 24/01/19.
- Nearby:** Contains the events "Werewolf Friday" on 11/01/19 and "Solid Meetup" on 04/01/19.
- My Event:** Contains the event "Chinese Newyear" on 05/02/19.

Each event entry includes a small red ribbon icon above the title and a calendar icon next to the date. At the bottom of each column is a small "All" button.

Figure 13.9 Attendee View



13.7 Event Search

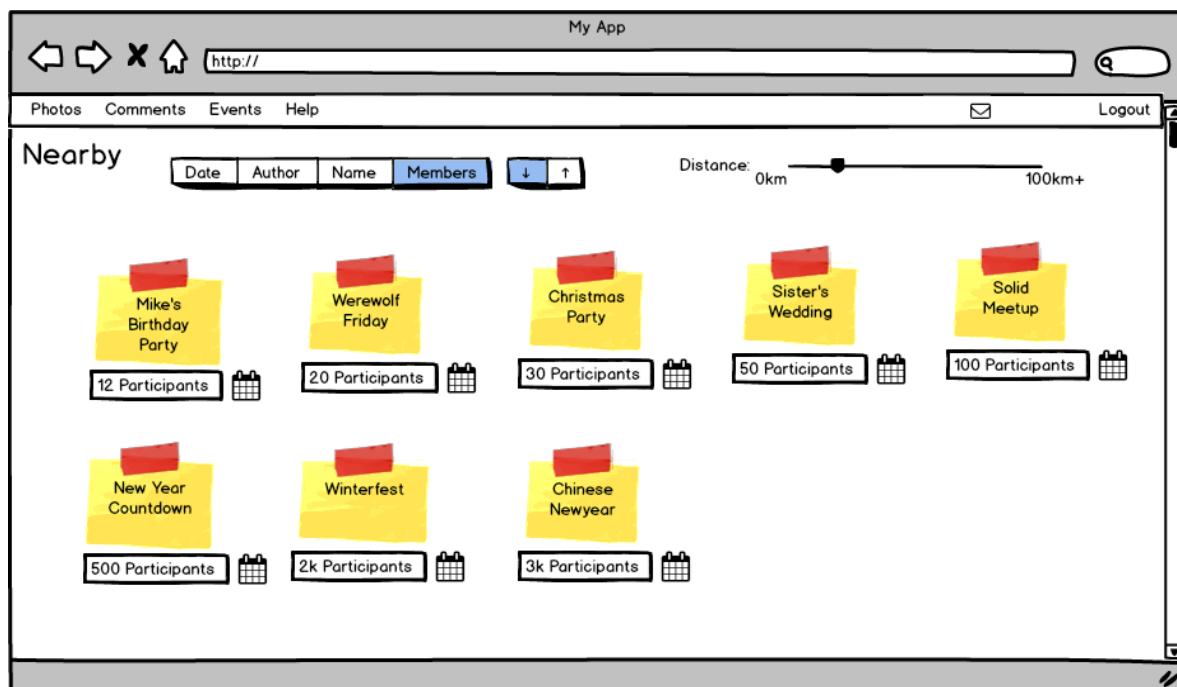


Figure 13.10 Search by Members

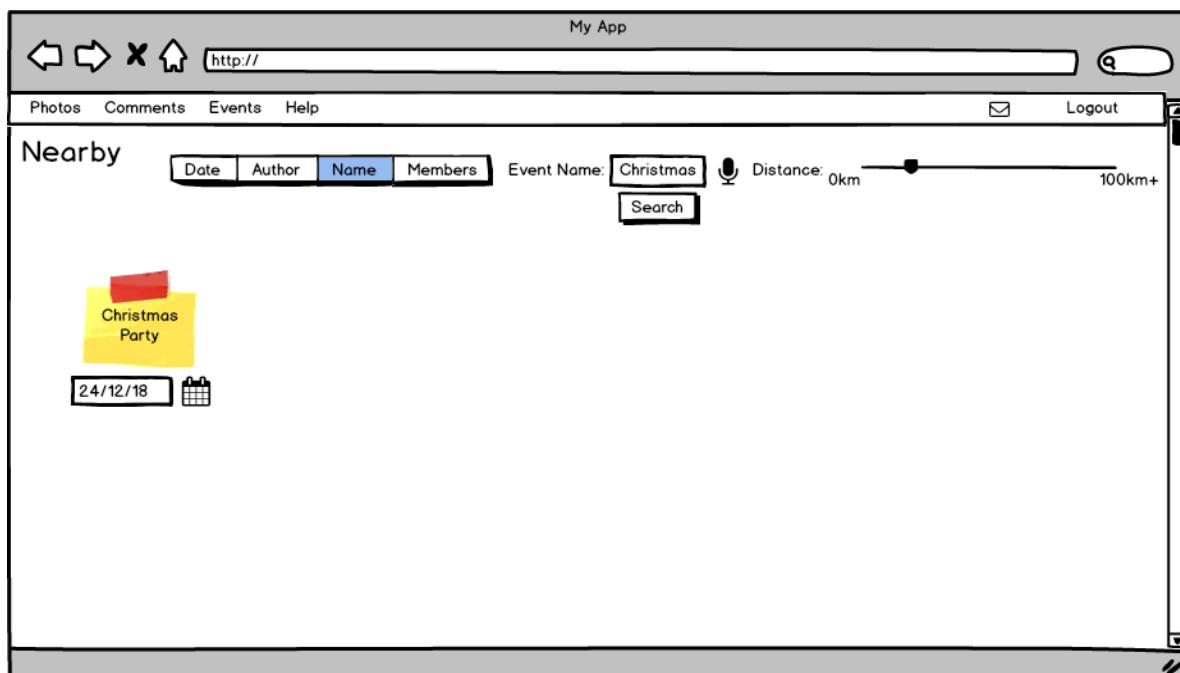


Figure 13.11 Search by Name



13.8 Scheduler-My Event

The screenshot shows a web-based event organizer interface titled 'My App'. At the top, there are navigation icons (back, forward, search, etc.) and a URL bar showing 'http://'. Below the header is a menu bar with links for 'Photos', 'Comments', 'Events', 'Help', a mail icon, and a 'Logout' button. The main content area is titled 'My Event' and displays three events as yellow sticky notes with red flags:

- Solid Meetup (04/01/19)
- Werewolf Friday (11/01/19)
- Chinese Newyear (05/02/19)

Each event note includes a date input field and a calendar icon. To the right of the event list is an 'EDIT' button. At the bottom of the page are two buttons: 'My Statistics' on the left and 'Create new event' on the right.

Figure 13.12 Organizer View



13.9 Scheduler-New Event

My App

Photos Comments Events Help Logout

New Event

Event Name:

Date: From / To /

Location:

Description:

Photos:

Videos:

Guest:

Type:

Figure 13.13 Create Event



TECHNISCHE UNIVERSITÄT
CHEMNITZ

13.10 Scheduler-My Statistics

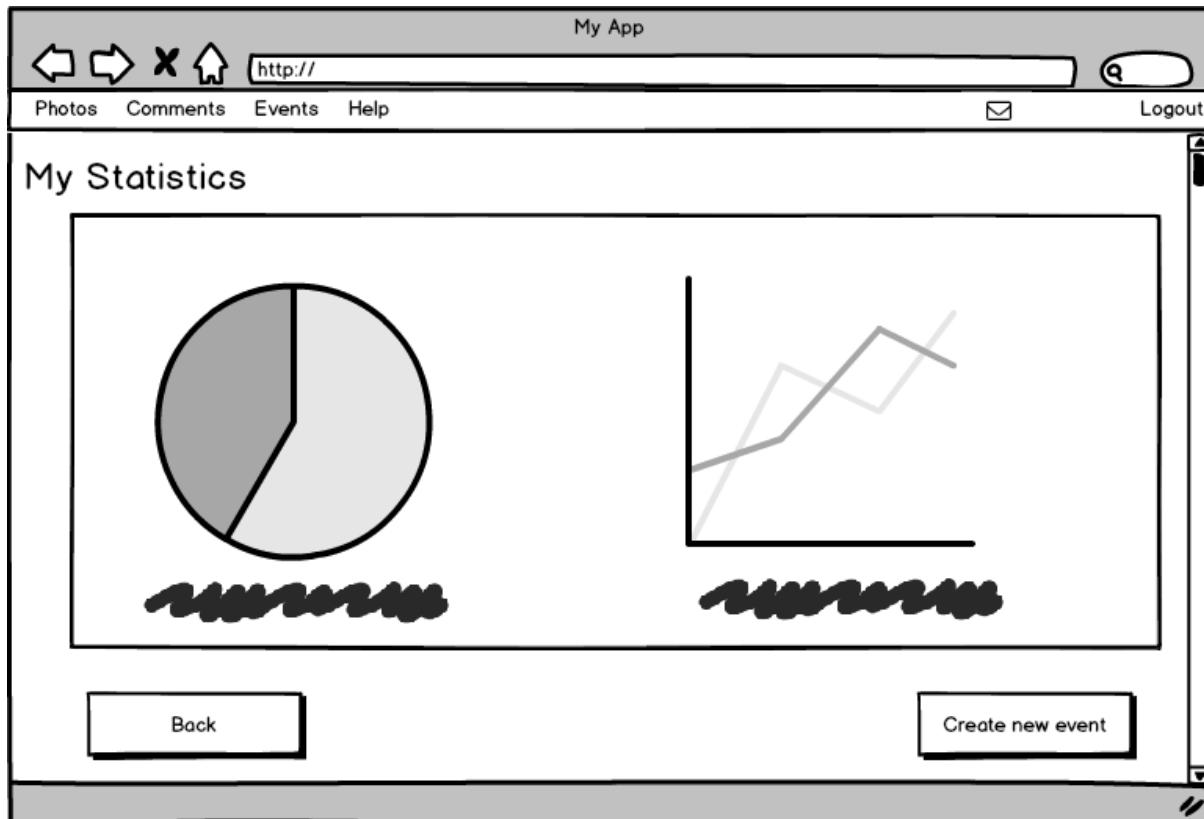


Figure 13.14 Event Analysis



13.11 Event Details

The screenshot shows a web application window titled "My App". The navigation bar includes links for Photos, Comments, Events, Help, and Logout. The main content area is titled "EVENTS DETAILS" and displays the following information:

- New Year Countdown** Organizer: [Bob](#)
- Date:** **Description:** Some description bla bla blabla
- Videos** [Find more](#)
A large video player placeholder with a play button, volume control, and a progress bar.
- Photos**
Three placeholder photo boxes, each with a heart, comment, and share icon, and a "More" button.
- Location:** City center somestreet1 Helloworld Square
A small map icon showing the location.
- Attendee**
A list of attendees with edit icons:
 - Alice
 - Bob
 - Charlie
 - Dave
 - Alice
 - Bob
 - Charlie[More](#)
- Join/Deregister** button

Figure 13.15 Event Details



TECHNISCHE UNIVERSITÄT
CHEMNITZ

Attendee

First Name: Last Name:

Alice	Bob
Charlie	Dave
Alice	Bob
Charlie	

Back

Figure 13.16 Attendee List



13.12 Contact

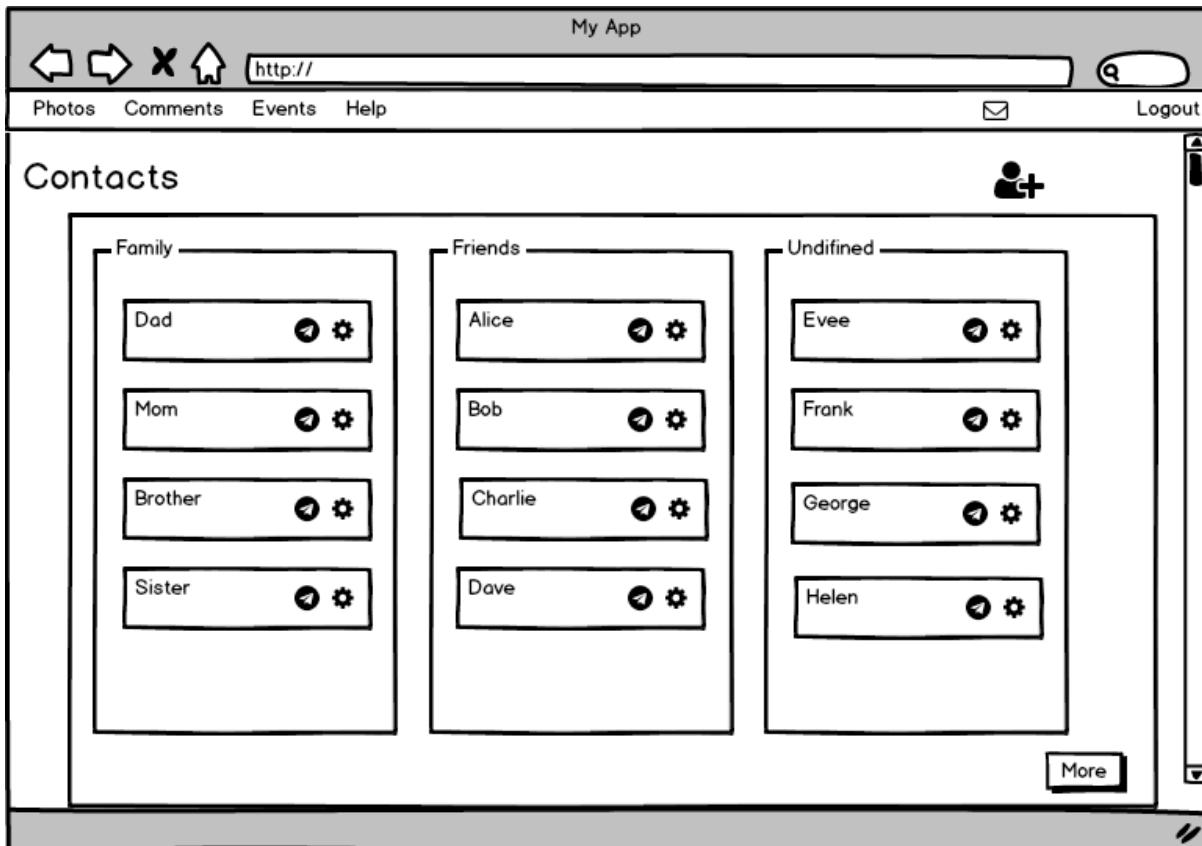
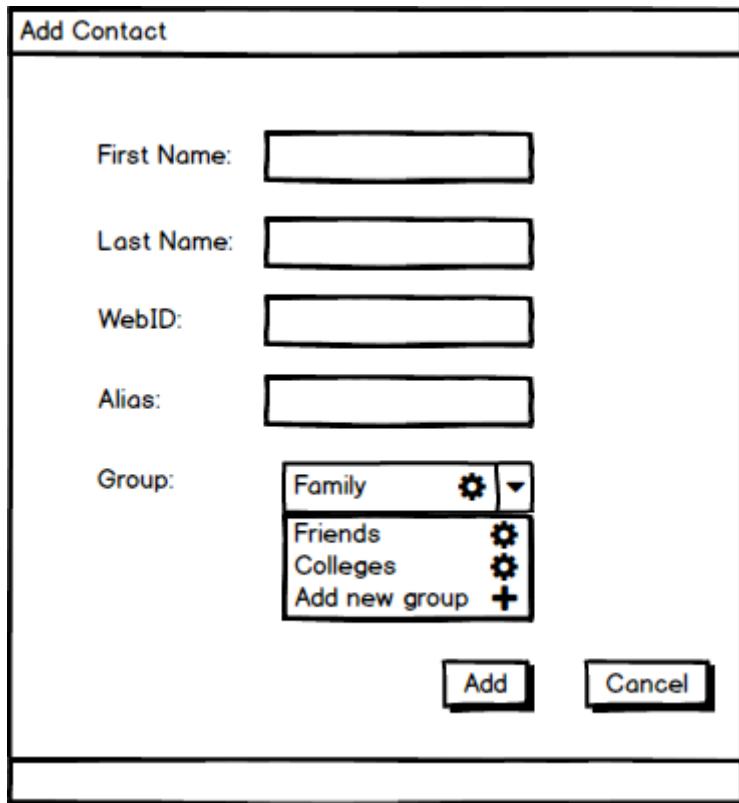


Figure 13.17 Contact

13.13 Add Contact



The screenshot shows a 'Add Contact' dialog box with the following fields:

- First Name: [Text input field]
- Last Name: [Text input field]
- WebID: [Text input field]
- Alias: [Text input field]
- Group:
 - Family [dropdown menu icon]
 - Friends [dropdown menu icon]
 - Colleges [dropdown menu icon]
 - Add new group [button with plus sign]
- [Add] button
- [Cancel] button

Figure 13.18 Add Contact

Unimplemented Product

14 Story1: Music List Management

14.1 Background

Music, or music industry, has a long history along the human culture and has played an important role on people's daily life. With the development of technology, especially since 1900, thousands of music styles and recording technologies bloom out. Now is the new era of music industry: Music on the cloud.

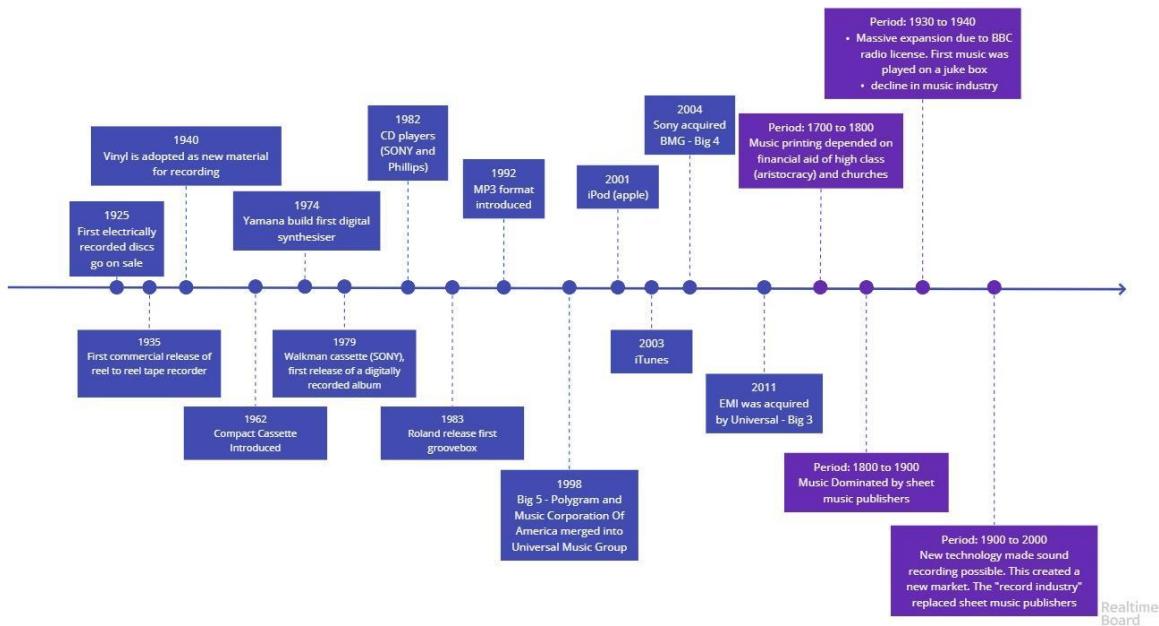


Figure 14.1 Timeline of music industry

But we see some problems happening today within music industry. As we all know, digitalization has brought a huge impact on the traditional recording industry. Now,

mobile is making the impact happen again. Many industries have combined their services to the mobile devices and make money through it. Music industry has done the first, but the second part is still remaining to solve.

First of all, The internet does not have the intellectual property right laws especially international legislation. This makes them hard to control the market. The opportunity to illegally download, and therefore infringe, copyright protected works

is exponentially increased by the digital world.

"No mature subscription service in the world only sells you one product, but that's what's happening with music at the moment,"

Mark Mulligan, industry analyst

Second, the current product structure within music industry is too simple, which makes it fragile when facing impacts from different dimensions. Nowadays, user has multiple of choice when choosing entertainment. Why would they pay for just listening to music? This had a knock-on the whole music industry: They have to lower their pricing strategy again and again to gain user's attention.



"Next generation music products need to be "dynamic, interactive, social and curated".

Mark Mulligan, industry analyst

The music industry now needs a revolution, it is a good approach if the industry can catch the trend of web3.0. Not just focusing on selling music, but also explore more possibilities like social functionality and connectivity. By integrating them in a proper way, make experience become the product.

14.2 Motivation

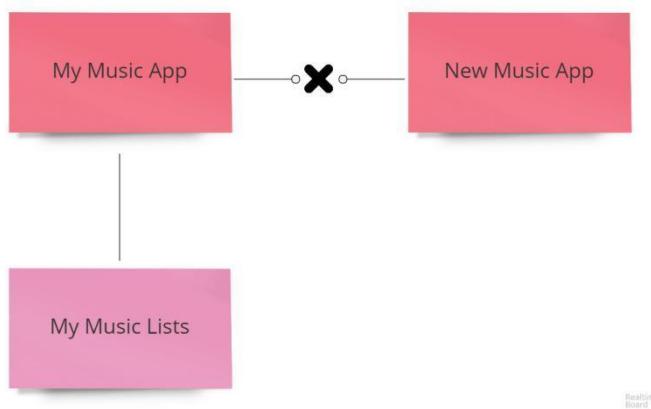


Figure 14.2 Current problem

I like music, when i was in china, i use chinese music apps to hear music. Since i move to germany, most of the songs in my music list are unavailable because of the copyright issue. The chinese music apps don't own the copyrights of the songs in european region. So i started to use another music app, here problem comes. There are thousands of songs in my favourite list and have been categorized into different lists. To migrate these lists is a huge work. Because this lists, which i created, were stored on server of the music app. When using a new music app, i have to search these songs one by one and categorize them again.

Luckily, i meet the concept of the Solid, which can perfectly solve this annoying problem. Solid is the abbreviation of "social linked data", which is a proposed set of conventions and tools for building decentralized social applications based on Linked Data principles. While using solid to build an application, you own your data, and Apps and data are separated by design, which makes it possible for app to reuse data created by another app.

In our project, we will prototype this idea and make it able to demonstrate. Every user will have a pod to store their lists and have the freedom to choose who is allowed to access it. When using a new music app, users can apply their music lists by one simple click.

14.3 Music industry within solid ecosystem

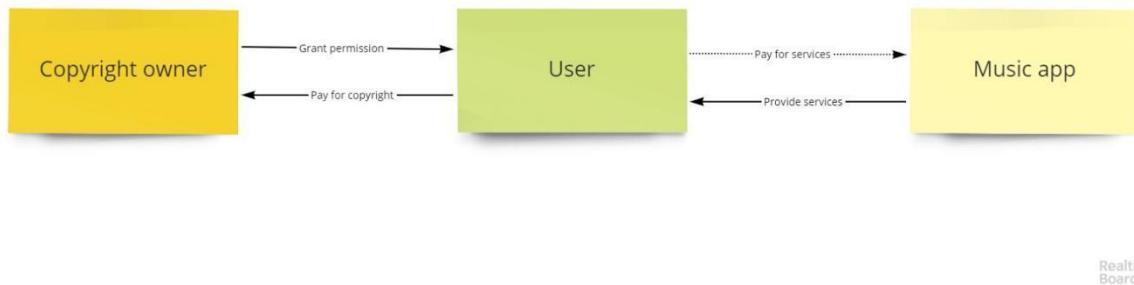


Figure 14.3 Music within solid ecosystem

For Users, they will have their own pod to store their music lists and the corresponding copyright certificates which they bought or rent from the copyright owner. Furthermore, they can store their social feed (comments, likes, etc.) around the music circle.

For record companies/ copyright owner / Artists, they will have the choice to store their music on their own pods or servers. When user wants to hear their music, they can grant permission (certificate) to user.

For Music applications, they will provide user good experience in aspects of user interface, usability, algorithms for daily recommendation and so on. What's more, with the growth of solid, they should also able to build a healthy social ecosystem to fulfill the user's social need. If needed, apps can charge with different pricing strategies, but not like today's pay for music (users have already paid to copyright owner), user will pay for better experience/service.

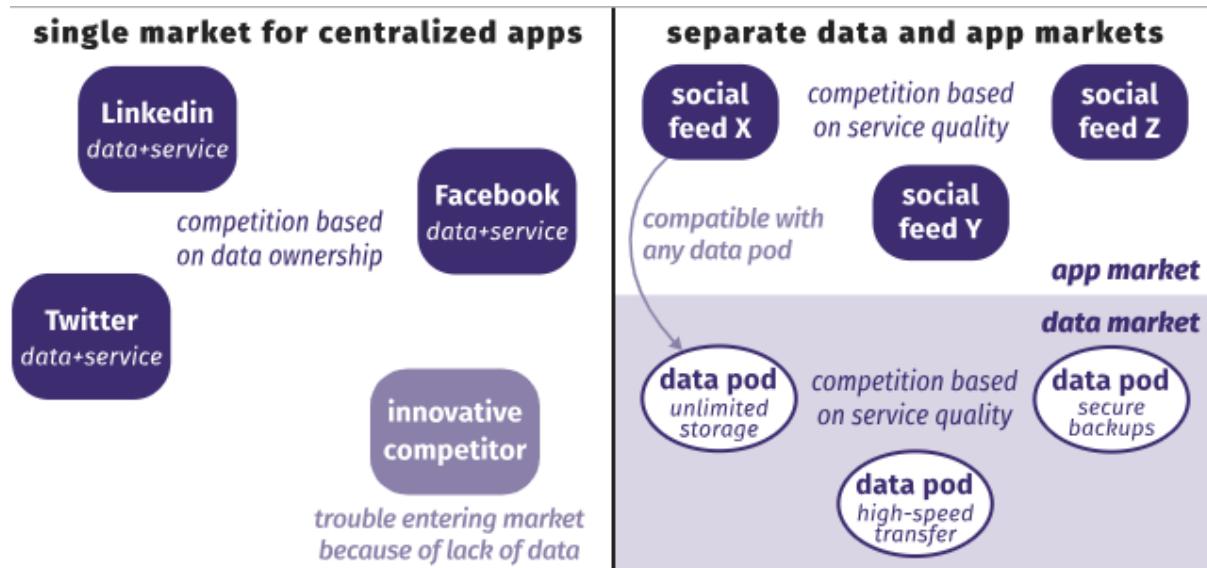


Figure 14.4 Apps become views

Solid separates not only the data and app, but also their markets. Current application and data are tight coupled. Companies compete with data and user amount.

Basically, the competitive advantage of many of today's popular centralized platforms is their [data silo](#), and the fact that their service depends entirely on access to that data.

Rubn Verborgh. "[Paradigm shifts for the decentralized Web](#)"

An app can be easily duplicated, yet their data can not. That's the core competition among nowadays application market. Users are forced to give their data and information to apps again and again, which will cause data redundancy and privacy problems. In China there was a famous competition between two taxi apps "didi" and "kuaidi". The companies behind them were Chinese Internet giants Tencent Holdings Ltd and Alibaba Group Holding Ltd. This competition is lasted for years and both companies spent billions of yuan on price war, just for winning users. At last, the two applications tied up. Thus, i can say, the current competition is more about money. Who has more money, who will more likely to gain better resources, thereby acquire more users.



Figure 14.5 Current business pattern

Same pattern can be applied on current music industry. Which app has larger music inventory, which will have more user. Those small companies with better craftsmanship in design and idea but less money, can not even step on the stage.

Since solid can separate the market of application and data, this problem will be solved. New possibilities and chances will show up.

On the application market, who can provide better user experience, who will win their share on the market. Users can easily switch between applications without substantial switching cost, i.e. vendor lock-in.

On the data market, new possibilities come up as well. Storage providers can explore niche market by providing different security and privacy levels to fulfill different needs.

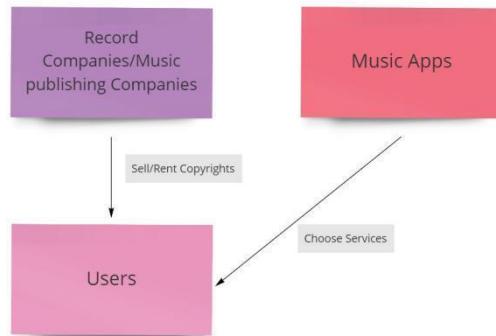




Figure 14.6 Solid business pattern

Within solid ecosystem, the record companies have the chance to conduct the vertical integration to become copyright retailers, users can pay less money and get better experience. And music application companies will pay more attention on better user experience rather than on the price war with other competitors. This would be a win-win.

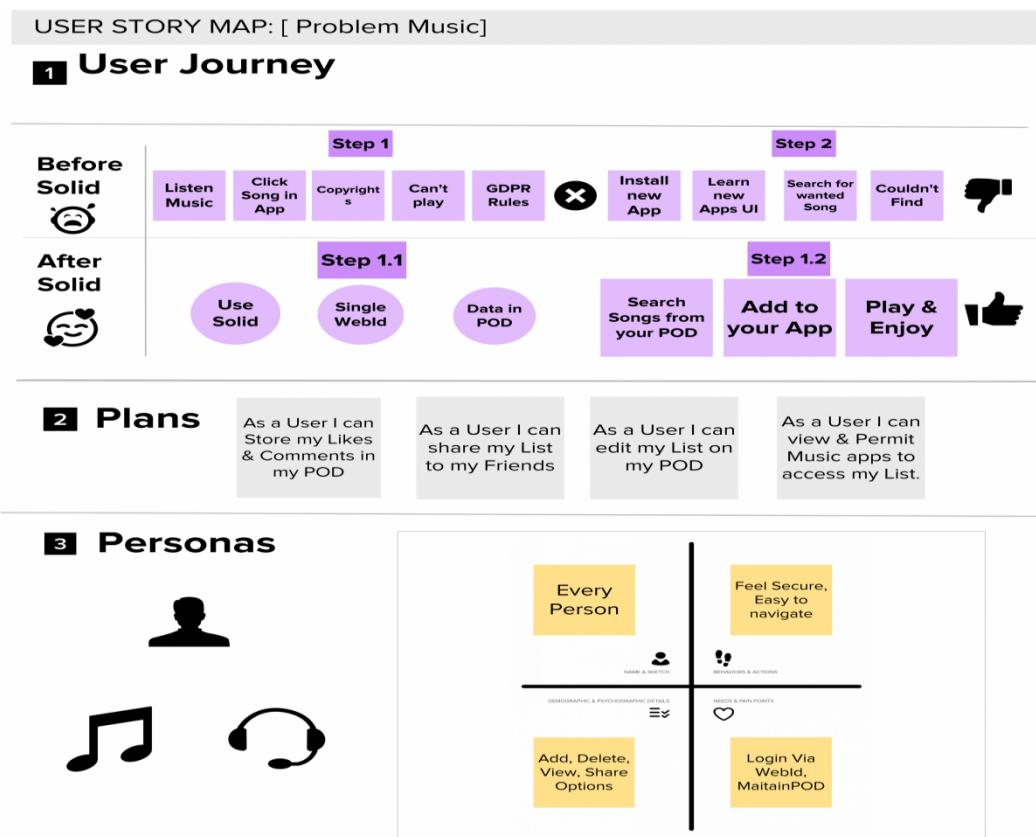


Figure 14.7 User Journey map

14.4 LFA analysis



14.4.1 Stakeholder analysis



Figure 14. 8 Stakeholder analysis: SWOT

In this case, we define the music industry as the stakeholders. Music app users is the target group. Those who are dedicated to solid and are interested at music industry, are the project partner. Music industry, music app users, solid group and solid related companies, are the beneficiaries.

14.4.2 Problem analysis

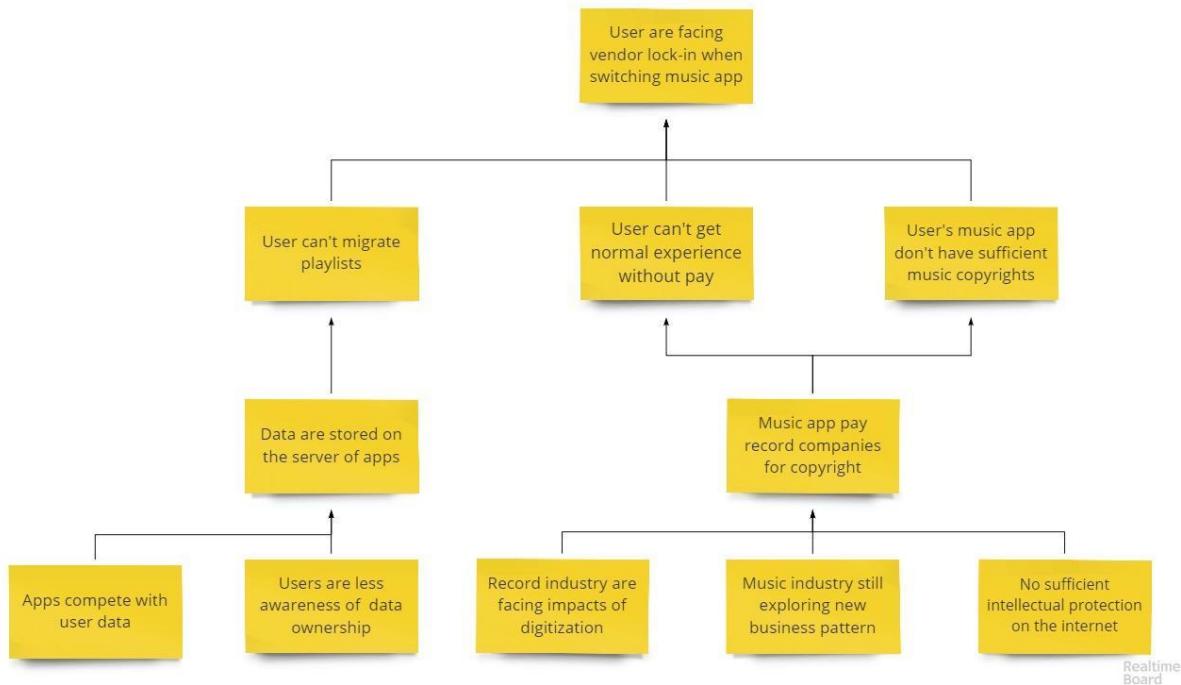


Figure 14.9 Problem tree

14.4.3 Objective analysis

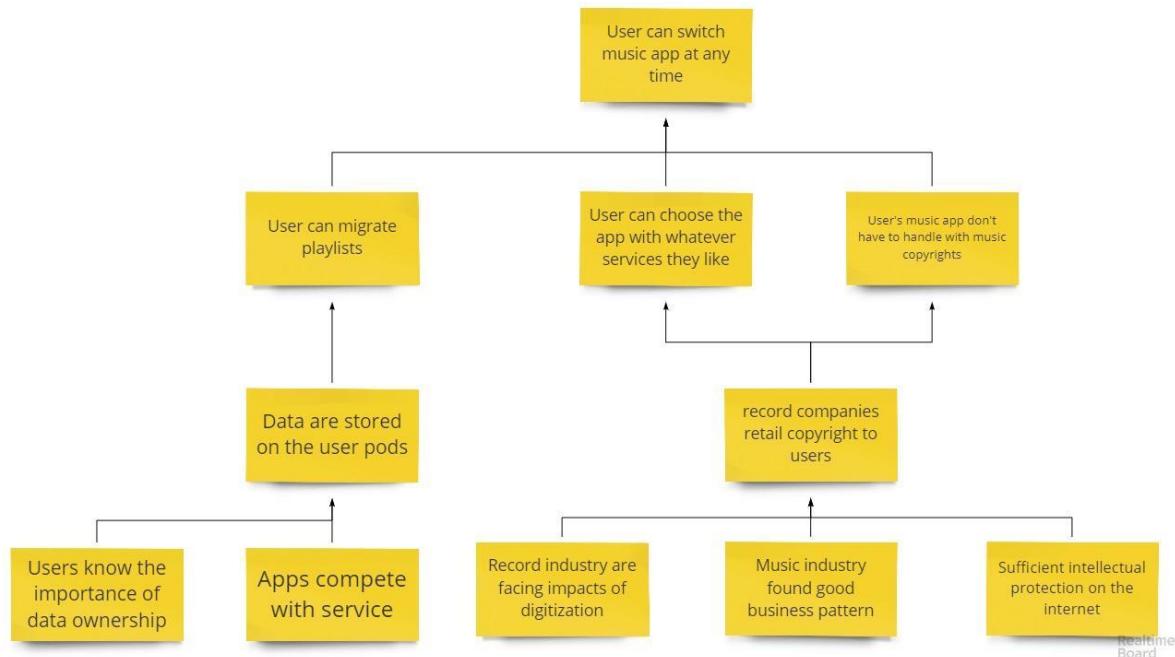


Figure 14.10 Objective tree



14.4.4 Strategy



Figure 14.11 Different degrees of decentralization

Solid is still a new prototype with rough ideas and experimental implementations, thus not ready for massive non-developers. There are different decentralization degrees that we need to wait and see. Due to that, we try to apply different strategies in different stages.

Stage1. Centralized application ecosystem of today

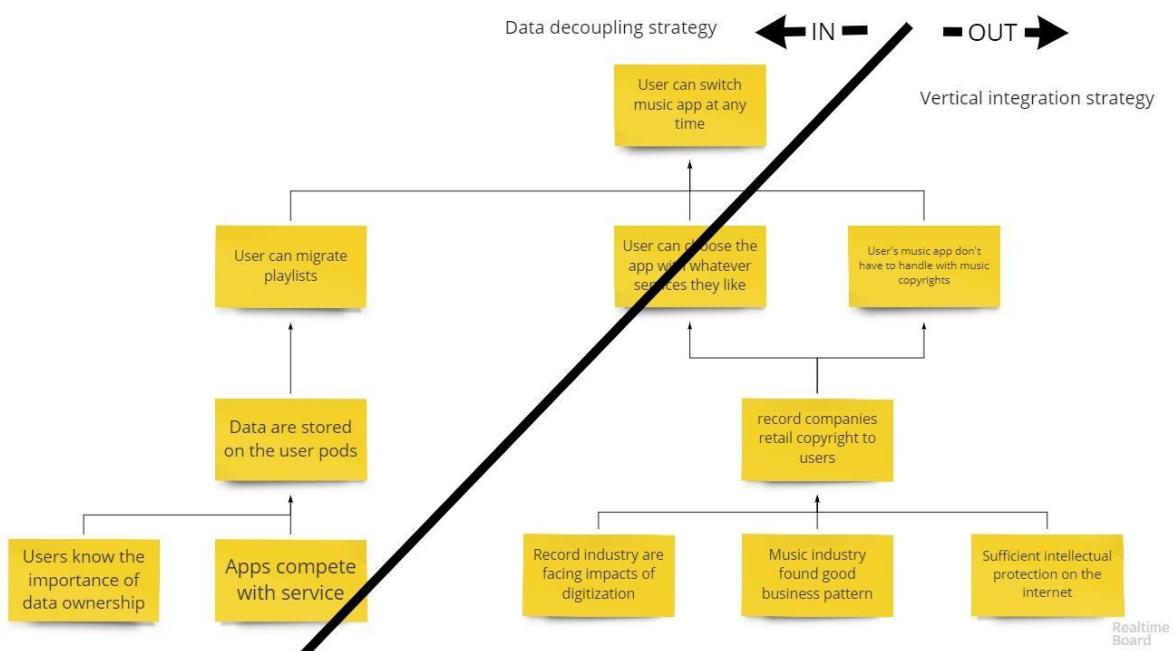


Figure 14.12 Data decoupling strategy

To breakthrough today's business pattern and change the user's behaviour, we need to start from the small but effective things to prove the superiority of decentralization web and let the users understand the importance and convenience of true data ownership. Thus we apply only the left part to demonstrate how it works.

Stage2. All strategy in the market growth phase

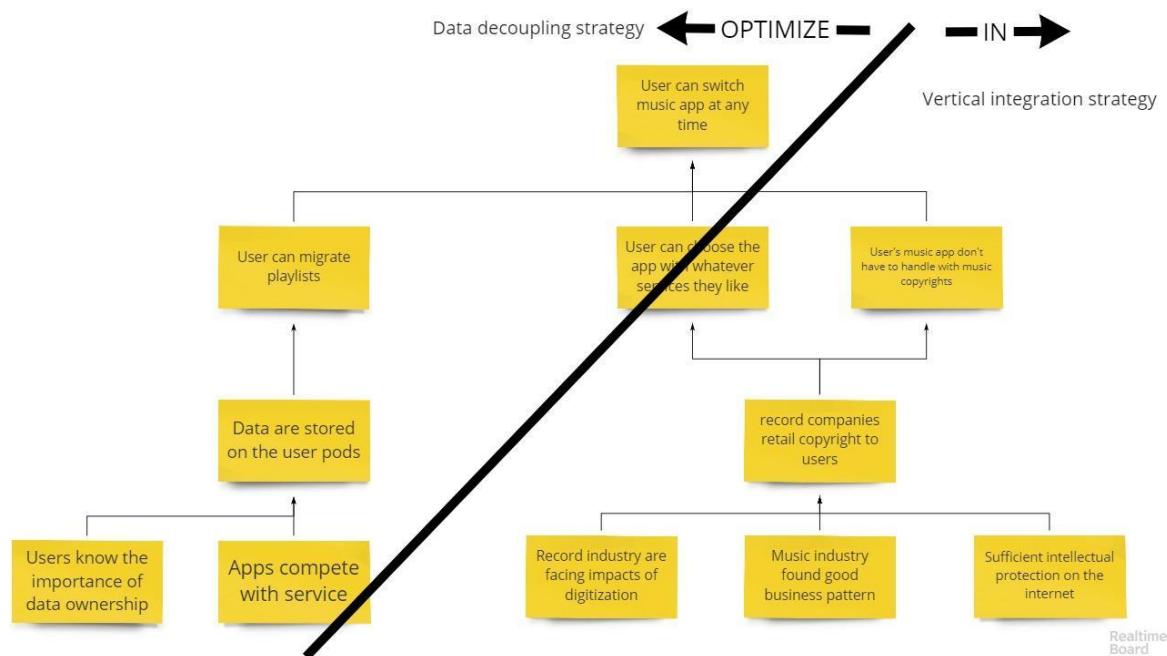


Figure 14.13 All strategy in stage2

With the growth of solid, data market will separate from the application market. Millions of non-developer users will exponentially grow. Thus, the improvement of security and stability need to be emphasized. In this phase, we will keep optimizing the former strategy, specific security level of pod regarding to different user purposes. In the meanwhile, start to implement the vertical integration strategy, bring new blood in and use the celebrity effect in music industry to push on further propagation and collaborate with governments on the legislation of online intellectual properties.

Stage3. Mature market standards.

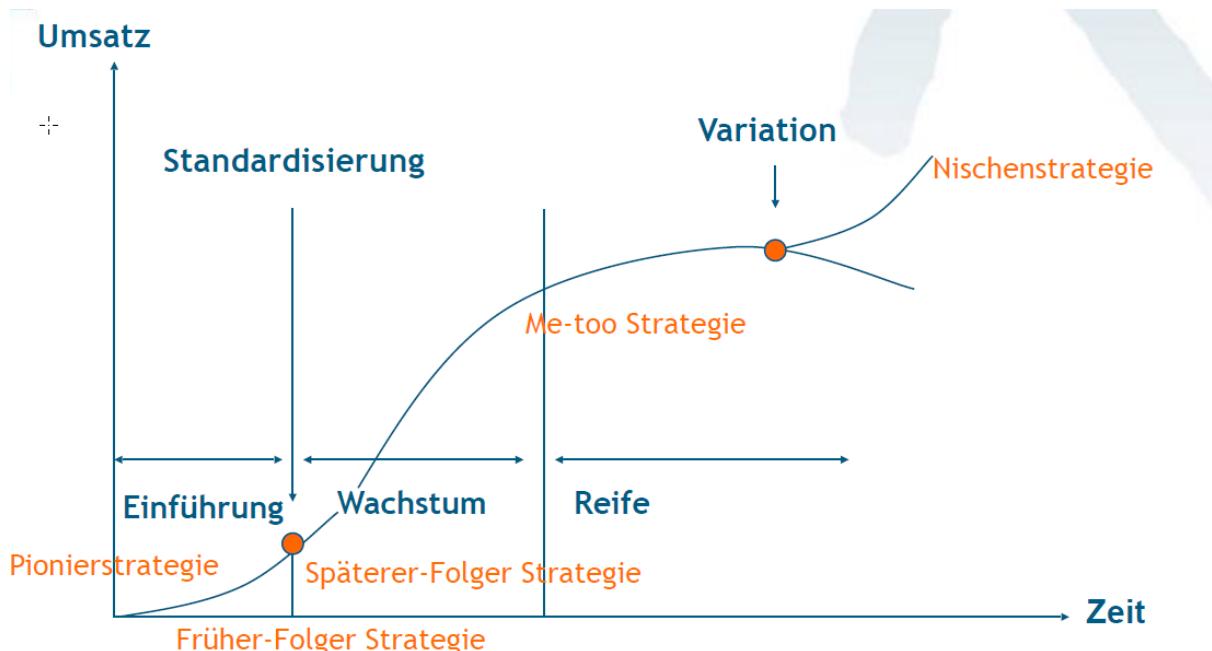


Figure 14.14 Gilbert/Strebel (1991) Strategien für neue Geschäfte

In this stage, the markets are mature, we will focus on standards making and business routine formulating. In the meantime, keep exploring innovations and niche markets.

At this time, the dream solid will come true.

15 Story2: Patient Medical record history

15.1 Introduction

Medical Record: The medical record some time also called health record and it is used to describe the systematic documentation of a single patient's clinical history and care across. The reason of the clinical record originated to document the patient's history. This permits medical doctors to recall the past and lets in prepared sharing of records when more than one expert are involved. Writing a history and dictating patient notes is an art, as we are required to be succinct, detailed, and compassionate.

The usual clinical record for inpatient care can include admission notes, on-service notes, progress notes (SOAP notes), preoperative notes, operative notes, postoperative notes, procedure notes, delivery notes, postpartum notes, and discharge notes.

Personal health data is combination many of the above aspects with portability, therefore permitting a patient to share clinical data across providers and health care systems. The personal health record was written on the paper traditionally. However, recently a few developed countries using advanced electronic medical records. Many consider the data in clinical records to be sensitive personal information protected with the aid of expectations of privacy, many ethical and legal problems are implicated in their maintenance, such as third-party get admission to and suitable storage and disposal. So, many have concerned of privacy on digital medical record storage.

15.2 Problem Scenario overview

One of the patients and our hypothetical future user shared his problem regarding to his health and medical record history.

First problem is that the patient was suffering for his illness prolong time about 7 years. He is suffering the Seizures problem and it is one of the causes of epilepsy. It is neurological disorder in which brain activity become abnormal, periods of unusual behavior, sensations, and sometimes loss of awareness. So, this is very serious and complex health issue. Furthermore, he said that the medical record history maintaining is very import for diagnosing these kinds of issue.

Second problem is about medical record history keeping appropriately filled for several years. During his prolonged illness, he had been consulted by several doctors from different hospitals and even from different country. Further he added that he is experiencing several challenges due is medical record history as it is in written on paper.

The medical record history maintaining and viewing a few challenges are as follows. First major problem is understanding and getting interested information quickest and meaning fully as the medical record is written on the paper. Furthermore, as patient needs to consult and diagnose by different doctors and experts from different hospital and even different country and some time some of the doctors could not understand hand writings of other doctors. Moreover, it is very time-consuming tasks for doctors to find the information from the records which they are interested because his record not just one or two pages, it is several hundred pages.

Another major problem with the medical record is maintaining and carrying it while going to hospital. As these records are several pages and different files that written by different doctors from many different hospitals. Moreover, after several years these records could not view properly. Addition to this, these records some time miss places.

In addition to above another important problem is that understanding language or interpreting actual meaning as these records written by different doctor and viewed by different doctor. For instance, some observation or finding one doctor could write in his



shorthand writing and that shorthand writing may interpret actual mean by other doctor my not not interpret actual meaning by another doctor.

In summary, the medical record problem is very complex and its very import for diagnosing some complex health issues. Therefore, these in a need of appropriate process to understand these kinds of problems and provide solutions

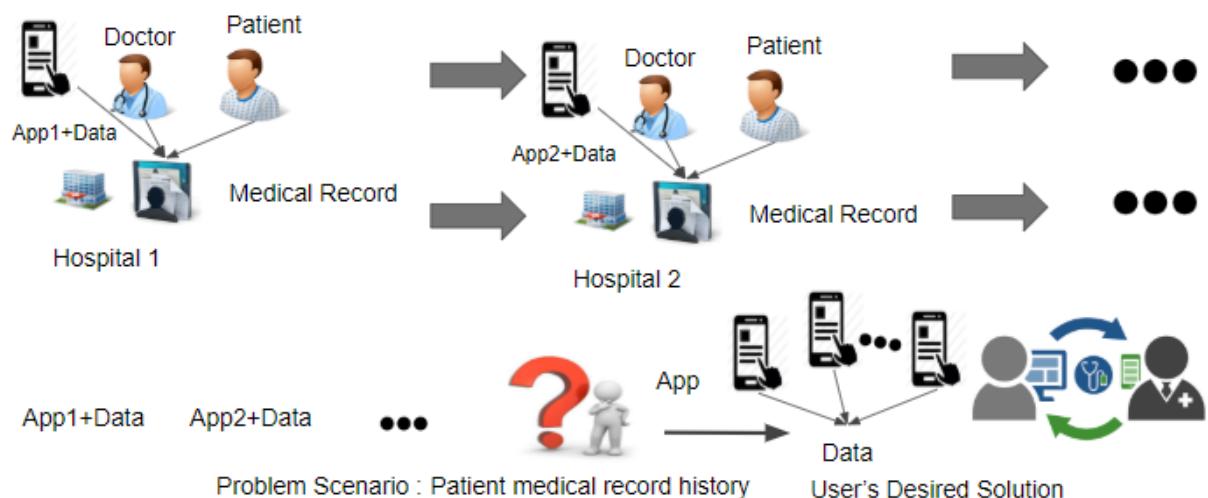


Figure 15.1 Problem scenario

15.3 User journey map



USER STORY MAP: [Problem Health Record]

1 User Journey



2 Plans

Personal Record	Personal Health Record	App For Doctor
As a Patient I want my Personal Profile to be stored on my Pod	As a Patient I want to store & Update my Health Record	As a Doctor I want to view Patient's History
As a User I want to store my Name, Age, Professional Details	As a Patient I want to store my test record in POD	As a Doctor I can Update Patient's Record

3 Personas



Figure 15.2 User Journey Map

16 Analysis output of feasibility

After Analysis phase. We faced problem when we try to develop the LFM. Our first assumption holds false in the ZigZag test. Because for now solid is still prototypical and doesn't provide enough features for us to develop such a product to fulfill the use of massive non-developers. We plan to define a new feasible product and start with it, we will grow with solid. We believe that one day our big story will come true.

17 Frameworks and Methodology

17.1 Agile

Everyone has its own task, but all have to work together to come with all pieces of output and team will be successful only when customer are satisfied. The process starts up with hiring project and after analyzing the project's requirements. Software development team apply business logic with user stories and requirements. Agile Team will collect all product and deliver on the time. This process is called as KANBAN process. The scrum master consultation with product owner and developer team organizing groups by requirements. So in next session all the task will be done in logical order. In agile these tasks are called as

sprints which assigned to typical developer for 2 weeks so next sprint should be achievable in a time every member has own responsibility to choose and handle the tasks. Developer Team takes feedback from stakeholders and product manager to improve desirable output which is called retrospective. By using this methodology, we can achieve consistency and better product delivery at a time.

Estimation: At the first moment we have found lot of backlogs to start the process. So, we selected some highly prioritized product backlogs in next stage to move forward.

Sprint Planning: Sprint Planning is about transforming Product Backlog items (or Stories) into Sprint Backlog (Tasks)

Team - Scrum: In Scrum Team each and every person is Cross-functional: ► developers, testers, user experience designers, etc. Each person has freedom to select the task according to personal skills. Membership should be changed only between sprints.

Daily Scrum Meeting

This is the time where we discuss what we have done so far and what should be in next level.

Sprint Review

Whatever increment has been done so far that will be collected and what should be next that will be updated in product backlog.

Sprint Retrospective

If any thing which needs for improvement in product and what is and what is working that will be considered.

17.2 Design Thinking

World is connected by world Wide Web. Smartphones and devices are connected to improve more user experiences to connect any device remotely. At this moment we all are using OAuth2 and Social links to connect with any application. But the problem which we found is the each and every time we are doing authentication via third party services which is taking our personal data indirectly. Second thing we analyse is when we are moving one app to another app we need to store data on different servers according to that application. This problem is major problem and we want to find solution regarding this one. So, from last 30 days We analyzed with latest technology framework solid to transform web into decentralization. Design Thinking method is for practical purpose and solve problem with creativity. It comes with engineering, architecture and business to improve more on successful stage. It focuses on core values to understanding people's needs.



It works on 4 core values understand, explore prototype and evaluate.

For complex problems this is best level solution to improve productivity with happy customers. In first stage first we need to understand what is need and what emotions are attached with this product.

Second stage is now engaging with the professionals or user experience designer to engage more people with your product. For example, Inrupt and solid community. Then we discussed problems what we have faced during questionnaires and feedback forms from users as well as community people. From that part we have made conclusion to go ahead with two problems which is completely new one and must need to change the way of working in current scenario.

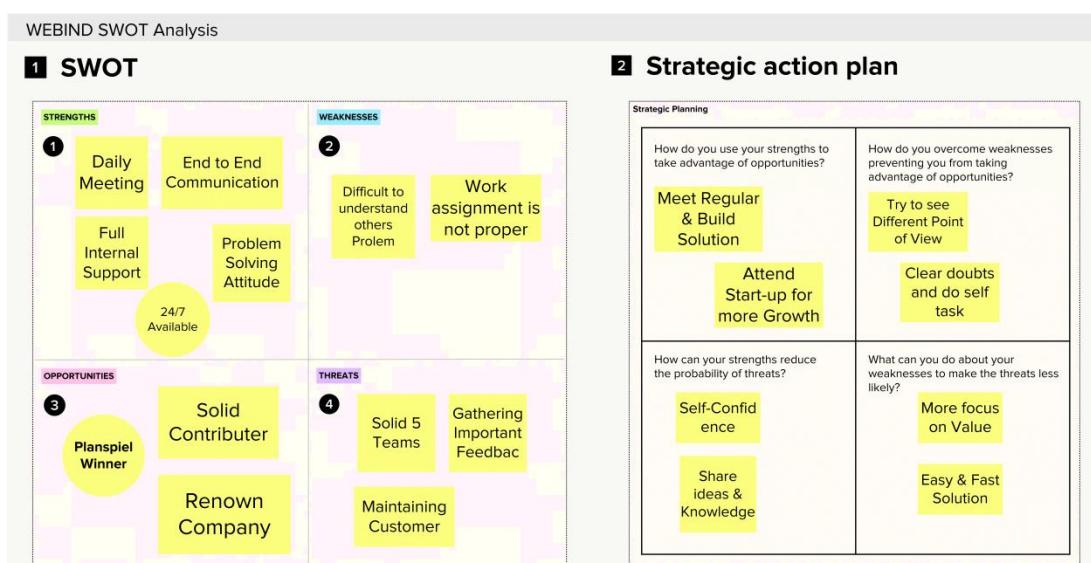


Figure 17.1 SWOT

17.3 Approach for understanding problem and solution

Approach or process which we follow to understand the problem and develop solution is very important. Since, above described both problems are from social sector and human way. As we aware that social sector issues would be more complex in nature and messy. Addition, our goal is to solve the real people problem. Therefore, we have chosen the Human-centered design (HCD) on the design thinking process.

Part III Tools and Technologies

18 Tools

After research we decide to use these tools to build and host our website

18.1 Amazon Web Services (AWS)

AWS one of the best Cloud Computing, on demand delivery of Compute power, database storage, applications, and other IT resources provider in cloud platform with pay-as-use approach. When your site has vast amount of the data and your stage is undecidable for storage at that time cloud computing will come in scenario. The EC2 (Elastic Computer Cloud) one virtual machine which can run on either Linux or Microsoft systems. S3 (Simple Storage Service) which handles large amount of file data. Network accessibility with cloudfront which provides encryption via SSL. RDBMS Relational database such as MySQL and Oracle provider which can easy manageable

Domain name Provider: AWS provides various types of domain extensions which is suitable for any organization.

Web Hosting: Amazon web services provides cloud web hosting for business, public and private sectors in low cost factor which delivers website and web applications.

Amazon Web Services provides Content Management System like WordPress, Drupal, Joomla and many more. AWS also supports many SDKs for popular platforms like JAVA, PHP and Node Js.

Use a Custom Domain Name for your Website

AWS Certificate Manager

AWS Certificate Manager (ACM) handles the complexity of creating and managing public SSL/TLS certificates. You can use public certificates provided by ACM (ACM certificates) or certificates that you import into ACM. ACM is tightly linked with AWS Certificate Manager Private Certificate Authority. You can use ACM PCA to create a private certificate authority (CA) and then use ACM to issue private certificates. These are SSL/TLS X.509 certificates that identify users, computers, applications, services, servers, and other devices internally.

18.2 Project Management Tools

18.2.1 Microsoft Project

This tool is the best product from microsoft and which is Developed by the Microsoft. It provides several functionalities for user to handle the project by reducing time complexity and boosting energy of workflows.

It behaves like assistant and supports to develop a plan. After plan we need to divide these tasks in several parts and the assign to individuals. It is time consuming tasks and

become more and more complex as project extends. To Solve this problem this tool is more sufficient to finish your tasks, to achieve your goal. By using this tool you can assign resources to the tasks, you can track progress of processes, you can distribute workloads and it is very easy to handle so any person in team can handle it. For cost factor equal to work times the rate it also can be measure by this tool which is very important for any project manager. Resources (people, Tasks and materials) can be shared with one another in tools. Each resource has its own Calendar, which tells what days and shifts of resource is available. It creates quick schedules and chain methodology likewise third-party add-ons to manage with more reliability. This tool provides the different classes of users who have different roles and authority to access or read and write data. Some objects such as Calendar, Views, Tables, Filters, Fields which are accessible by all users.

It has several interesting and surprising features:

1. Interoperability

We can extend functionalities using microsoft project Web Access. Project Server Stores All data in SQL database in center with allowance of multiple shared resources.

2. Scheduling for Tasks

User can schedule Tasks according to timeline as well as deadline.

3. Timeline

User can build Visio style of graphical views of the Project which can be embedded in any application.

18.2.2 Trello

Trello is one best and easiest tool for project management. It is one surface where many things are exists. One great benefit is that it available as Web application and also in Smartphone apps both for android and apple devices. You can manage your ideas there. you can create tasks and To-Do lists there with date and time and you can share with your team members who can see and get the idea.

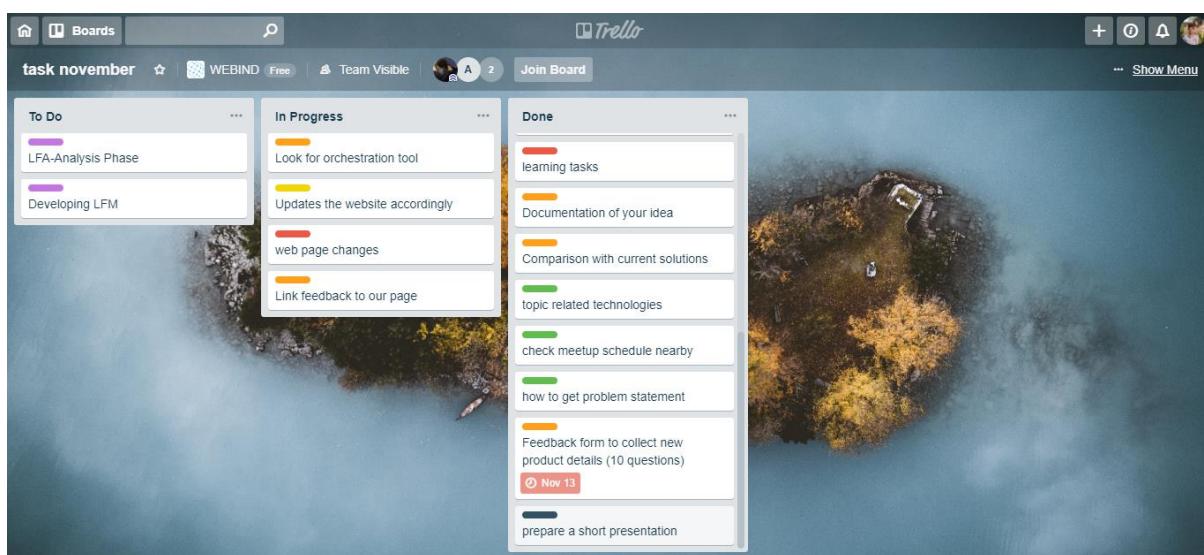


Figure 18.1 Trello

In Trello we have highlight feature where we can see month wise task distribution, in which we have three categories. First category is Pending - which tasks are pending that will be shown with color label. Second category is Doing - which tasks are already going on recently that has also green color. Third category is Done - Which tasks are already completed on this month that we be shown here.

18.2.3 Google Calendar

In Google Calendar we can assign the tasks to the particular date and time. We can assign our tasks to colleague. Before, deadline we will get reminder notification. We can share our calendar schedule to the team members.

18.2.4 Gmail

With the new Design of Gmail now we can manage your tasks in gmail from side panel. It's similar to Google Calendar which we have already used before. We can also make to do list from gmail. You can also manage CRM (Customer Relationship management) functionality from the Gmail.

18.2.5 Slack

One tool which is cloud based application for managing team tasks with Collaboration of individuals. It provides IRC (Internet Relay Chat) like features. It is working on Client/Server networking model. We can use web application or by third party providers. We can do private as well as group chat. All contents in slack are searchable for example including files, people, messages etc.

It has most recent features.

18.2.5.1 Teams

It provides community, groups, or teams to join through a specific URL or by invitation sending to the team admin or owner in Slack. Although Slack was used for organizational communication, it has been slowly turning into a community platform.

18.2.5.2 Messaging

Public channels allow team or team-members to communicate. No needs to use email or group SMS (texting). Open to everyone in the chat, already clients are provided on built in stage. Private channels allow only private conversation between smaller sects of the overall group. The tool can be used to divide large teams into specific projects. We can send direct messages to specific user as well as in group.

18.2.5.3 Integration

Large numbers of third-party library services and support are available. Major integration includes Google, Dropbox, Trello, GitHub. This integration allows users to access features from directly within the Slack interface.

18.2.6 Skype

Sometimes we need to do face to face communication When you are on Business trip or out of country. Skype provides all feature including audio and video chatting. We can do video call personally or we can add more members in discussion.

18.3 HTML, CSS & Bootstrap Framework

Html - html is Hyper Text Markup Language for creating web pages. It defines structure of web pages. HTML elements are building block of the HTML pages.

CSS - Cascading Style Sheets is a style sheet language used to present a document written in a markup language like HTML. It enables distinction between presentation and content, including layout, colors, and fonts. This difference can improve content accessibility, provide more stretch ability and control in the specification of presentation characteristics, It enables multiple web pages to share formatting by specifying the relevant CSS in a separate .it gives sense to user that which part of the website user is interacting by giving hover, focus, blur effect with color change of relevant component. User can get idea that previously component or links of web page are visited or not. It reduces complexity and repetition in the structural content of web.

Bootstrap Framework - It is building responsive, mobile-friendly projects on the web with the world's one of the most popular front-end side component library. It is an open

source toolkit for developing with HTML, CSS, and JavaScript. Quick giving prototype to your ideas and making your entire app with its Sass variables and mixings, with responsive grid system, extensive pre-built components, and powerful plugins built on jQuery.

18.4 JavaScript

JavaScript is interpreted programming language. Html, CSS and JavaScript all three are main component of the World Wide Web. It enables interactivity with webpages. The major browser has dedicated JavaScript Engine to execute it in browser.

18.4.1 Dynamic Typing:

JavaScript is dynamically written by user like most other scripting languages. A type is associated with a value instead of an expression. JavaScript is supporting different ways of test and type of objects.

Run-time evaluation eval function that can execute statements provided as strings at run-time in program file.

18.4.2 Prototype-based (object-oriented)

It is almost object based and small number of built in object, including function and date.

18.5 jQuery

jQuery is a JavaScript library designed to simplify HTML DOM (Document Object Model) tree traversal and manipulation. It manages event handling, animation in page, and Ajax - Asynchronous JavaScript and XML. It is free, open-source for using the permissive MIT License in web. It is also capable to make plug-ins top on JavaScript library. It enables users to create abstractions for low-level interaction and animation with advanced effects and high-level of theme able widgets. To make more powerful dynamic webpage using modular approach with jQuery library. jQuery provides the syntax for finding, selecting, and manipulating DOM elements of html pages.

19 Solid

19.1 Solid Introduction

Solid intends to profoundly change the way Web applications work today, bringing about obvious information possession and in addition enhanced security. In Solid, you remain the information proprietor. You choose for each and every bit of information you create where you need to store it. Applications can ask for authorization to explicit parts of individuals' information, which they join at runtime into an individual experience.



19.2 Solid Ecosystem

Solid is an ecosystem of data and application that works seamlessly collectively. It is a fascinating new project driven by Prof. Tim Berners-Lee, creator of the World Wide Web, occurring at MIT. The task objectives to drastically change the way Web applications work today, resulting in legitimate data ownership as appropriately as extended security.

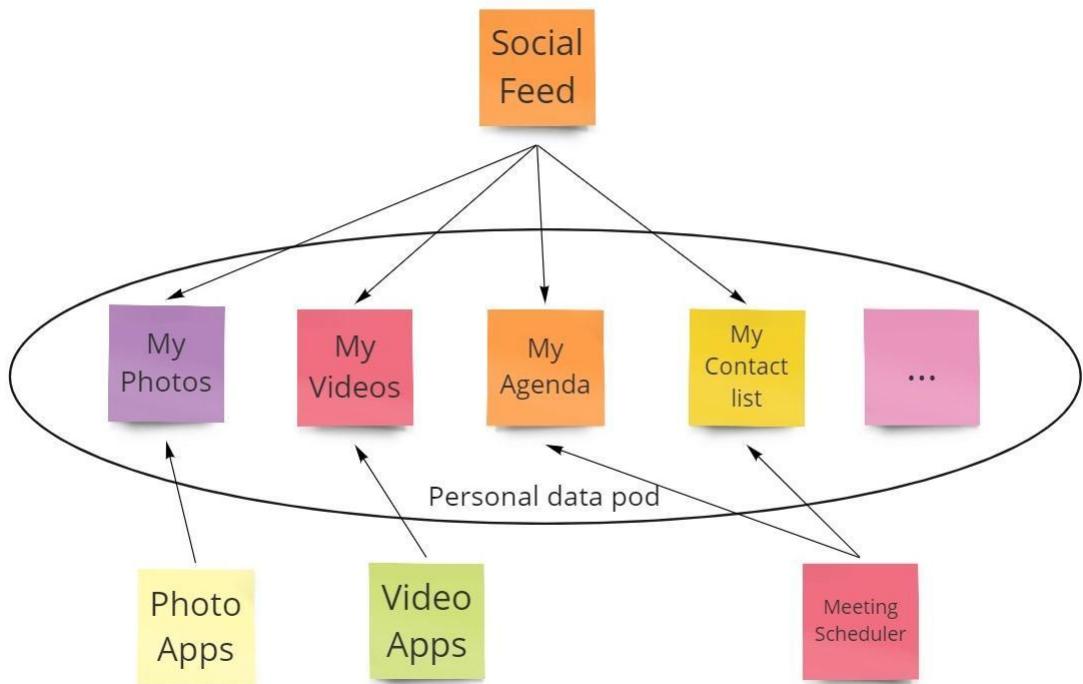


Figure 19.1 Solid Ecosystem

20 Conclusion

WEBIND goal is to provide you an extraordinary solution to a problem of Web domain. Your queries and our best result will be our goal. We constantly measure our work and provide a innovative solution. We believe in learning together and share to everyone. So it satisfies our belief, bind the future.

21 Appendix

21.1 Activity List

Date	Location	Activities	Participants
2018.10.15	Mensa	<ul style="list-style-type: none"> - First Team Meeting - Define Tasks - Team tools initialization: WhatsApp, Google Drive 	Aditya, Dattatrya, Mayur, Yichen
2018.10.16	Dormitory	<ul style="list-style-type: none"> - Ask Senior guy's advice/experience 	Aditya,Dattatrya, Mayur,Yichen
2018.10.17	Mensa	<ul style="list-style-type: none"> - Prototype of Mission/Vision 	Dattatrya, Mayur,Yichen
2018.10.18	Library	<ul style="list-style-type: none"> - Design Logo/Website - Brainstorming Team Name/Mission/Vision - Search for webpage hosting service 	Aditya,Dattatrya, Mayur,Yichen
2018.10.19	Library	<ul style="list-style-type: none"> - Optimize Webpage - Decide to use AWS 	Aditya,Dattatrya, Mayur,Yichen
2018.10.20	Library	<ul style="list-style-type: none"> - AWS learning - Buy domain - Web page hosting 	Aditya,Dattatrya, Mayur,Yichen
2018.10.22	Library	<ul style="list-style-type: none"> - Prepare for presentation - Take team photos 	Dattatrya, Mayur,Yichen
2018.10.24	Library	<ul style="list-style-type: none"> - Optimize Mission/Vision/Logo/Web site 	Aditya,Dattatrya, Mayur,Yichen
2018.10.25	Library	<ul style="list-style-type: none"> - Optimize Mission/Vision/Logo/Web site 	Aditya,Dattatrya, Mayur,Yichen
2018.10.26	Library	<ul style="list-style-type: none"> - Finish pending tasks 	Aditya,Dattatrya, Mayur,Yichen



2018.10.30	Library	<ul style="list-style-type: none">- Optimize Website due to adviser's feedback- Try to add ssl certificate	Aditya,Dattatrya, Mayur,Yichen
2018.10.31	Library	<ul style="list-style-type: none">- Learn Amazon Certificate manager- start documentation of October report- ssl certificate success added	Aditya,Dattatrya, Mayur,Yichen
2018.11.02	Library	<ul style="list-style-type: none">- Finalize October report and submit	Aditya,Dattatrya, Mayur,Yichen
2018.11.06	Library	<ul style="list-style-type: none">- Decide to remake the website without using template	Aditya,Dattatrya, Mayur,Yichen
2018.11.07	Library	<ul style="list-style-type: none">- Choosing topic- start making new website- start using more team tools: trello/slack	Aditya,Dattatrya, Mayur,Yichen
2018.11.09	Library	<ul style="list-style-type: none">- Learn solid (lunch break/angular)	Aditya,Dattatrya, Mayur,Yichen
2018.11.10	Library	<ul style="list-style-type: none">- Make new website- Adding solid introduction to website- Get in touch with solid forum	Aditya,Dattatrya, Mayur,Yichen
2018.11.12	Library	<ul style="list-style-type: none">- Continue learning solid- Brainstorming solid products	Aditya,Dattatrya, Mayur,Yichen
2018.11.14	Library	<ul style="list-style-type: none">- Continue making new website	Aditya,Dattatrya, Mayur,Yichen
2018.11.16	Library	<ul style="list-style-type: none">- Continue making new website- Prepare for pitch	Aditya,Dattatrya, Mayur,Yichen
2018.11.19	Library	<ul style="list-style-type: none">- Learn user story mapping	Aditya,Dattatrya, Mayur,Yichen



2018.11.22	Library	<ul style="list-style-type: none">- Continue making new website- Brainstorming solid products	Aditya,Dattatrya, Mayur,Yichen
2018.11.23	Library	<ul style="list-style-type: none">- Finalize new website- Take professional team photos with professional camera	Aditya,Dattatrya, Mayur,Yichen
2018.11.25	Dormitory	<ul style="list-style-type: none">- Hosting new website- Prepare for pitch- Making slides	Aditya,Dattatrya, Mayur,Yichen
2018.11.26	Library	<ul style="list-style-type: none">- Prepare for pitch- Discuss for optimizing our presentation due to first pitch day	Aditya,Dattatrya, Mayur,Yichen
2018.11.27	Library	<ul style="list-style-type: none">- Prepare for pitch- Optimize slides- Rehearsal	Aditya,Dattatrya, Mayur,Yichen
2018.11.28	Campus1	<ul style="list-style-type: none">- Rehearsal before planspiel session	Aditya,Dattatrya, Mayur,Yichen
2018.11.30	Library	<ul style="list-style-type: none">- Finalize November report and submit	Aditya,Dattatrya, Mayur,Yichen
2018.12.04	Library	<ul style="list-style-type: none">- Retrospective of last month- Define future tasks using trello	Aditya,Dattatrya, Mayur,Yichen
2018.12.07	Library	<ul style="list-style-type: none">- Share each other's knowledge after learning solid	Aditya,Dattatrya, Mayur,Yichen
2018.12.09	Dormitory	<ul style="list-style-type: none">- Learning and exploring Solid Angular Framework	Dattatrya,Yichen
2018.12.11	Library	<ul style="list-style-type: none">- Share each other's knowledge after learning solid	Aditya,Dattatrya, Mayur,Yichen
2018.12.14	Library	<ul style="list-style-type: none">- Learning and exploring Solid Angular Framework	Dattatrya,Yichen
2018.12.16	Dormitory	<ul style="list-style-type: none">- Learning and exploring	Dattatrya,Yichen



		Solid Angular Framework - Learning RDF	
2018.12.17	Dormitory	- Learning and exploring Solid Angular Framework - Learning RDF - Start coding of basic functionality	Dattatrya,Yichen
2018.12.17	Library	- Share each other's knowledge after learning solid	Aditya,Dattatrya, Mayur,Yichen
2018.12.18	Library	- Share each other's knowledge after learning solid	Aditya, Mayur,Yichen
2018.12.18	Dormitory	- Learning and exploring Solid Angular Framework - Learning RDF - Start coding of basic functionality	Dattatrya,Yichen
2018.12.19	Dormitory	- Learning and exploring Solid Angular Framework - Learning RDF - Start coding of basic functionality - Making Mockups for product	Dattatrya,Yichen
2018.12.21	Campus1	- Meeting with Mr. Andre for getting advice	Dattatrya, Mayur,Yichen
2018.12.22	Dormitory	- Try to fetch photos from public folder	Dattatrya,Yichen
2018.12.24	Dormitory	- Discuss for December report	Aditya,Dattatrya, Mayur,Yichen
2018.12.26	Dormitory	- Report writing - Start design feedback survey	Aditya,Dattatrya, Mayur,Yichen
2018.12.28	Dormitory	- Finalize December report and submit	Dattatrya,Yichen
2019.01.01	Dormitory	- Decide to reorganize and	Dattatrya,Yichen



		<ul style="list-style-type: none">optimize the report's structure- Learn agile and design thinking in practice	
2019.01.02	Dormitory	<ul style="list-style-type: none">- Develop user story- Design paper prototype	Dattatrya,Yichen
2019.01.04	Dormitory	<ul style="list-style-type: none">- Continue optimizing and researching for Alignment	Dattatrya,Yichen
2019.01.07	Library	<ul style="list-style-type: none">- Discuss future tasks- Optimize report structure	Dattatrya, Mayur,Yichen
2019.01.11	Library	<ul style="list-style-type: none">- Report guideline- Coding work through- Next 3 weeks plan- MVP content finalization- Business Canvas (Feedback questionnaires finalization, Feedback plan)- Intermediate speech task planning- Tee shirt plan	Dattatrya, Mayur,Yichen
2019.01.13	Dormitory	<ul style="list-style-type: none">- Develop Product backlog- Develop User Story Map- Estimation of tasks	Dattatrya,Yichen
2019.01.15	Dormitory	<ul style="list-style-type: none">- Product backlog- Presentation planning	Dattatrya,Yichen
2019.01.16	Library	<ul style="list-style-type: none">- Presentation- Task distribution	Aditya,Dattatrya, Mayur,Yichen
2019.01.17	Library	<ul style="list-style-type: none">- Prepare for Presentation	Aditya,Dattatrya, Mayur,Yichen
2019.01.18	Dormitory	<ul style="list-style-type: none">- Prepare for Presentation	Dattatrya,Yichen
2019.01.19	Library	<ul style="list-style-type: none">- Optimize Feedback Survey- Organize received feedbacks- Develop prototype	Aditya,Dattatrya, Mayur,Yichen

2019.01.21	Campus1	- Rehearsal for 2nd pitch	Aditya,Dattatrya, Mayur,Yichen
2019.01.22	Library	- Stand up meeting for development	Aditya,Dattatrya, Mayur,Yichen
2019.01.23	Library	- Stand up meeting for development	Aditya,Dattatrya, Mayur,Yichen
2019.01.24	Library	- Prototype development	Aditya,Dattatrya, Mayur,Yichen
2019.01.25	Library	- Prototype development	Aditya,Dattatrya, Mayur,Yichen
2019.01.26	Library	- Stand up meeting for development	Aditya,Dattatrya, Mayur,Yichen
2019.01.30	Library	- Prototype development - Business plan for interview	Aditya,Dattatrya, Mayur,Yichen
2019.01.31	Dormitory	- Prototype development	Dattatrya,Yichen
2019.02.03	Dormitory	- Prototype development	Dattatrya,Yichen
2019.02.04	Leipzig	- Meeting with Company	Aditya, Mayur
2019.02.08	Dormitory	- Prototype development	Dattatrya,Yichen
2019.02.09	Library	- Planning for New features in Working demo	Aditya, Mayur
2019.02.11	Dormitory	- Prototype development	Dattatrya,Yichen
2019.02.12	Dormitory	- Prototype development	Dattatrya,Yichen
2019.02.15	Library	- Demo delivery for pitch	Aditya,Dattatrya, Mayur,Yichen
2019.02.16	Library	- UI implementation	Aditya, Mayur, Yichen
2019.02.20	Leipzig	- Solid Meetup	Aditya
2019.02.20	Library	- Prototype development	Dattatrya,Yichen
2019.02.23	Dormitory	- Prototype development	Dattatrya,Yichen
2019.02.26	Library	- New feature check for	Aditya, Mayur



		demo	
2019.02.28	Dormitory	- Prototype development	Dattatrya,Yichen
2019.03.01	Dormitory	- Prototype development - Monthly report delivery	Dattatrya,Yichen

References

- [1] Psychology Of Color In Logo Design [Online]. Available: <https://thelogocompany.net/blog/infographics/psychology-color-logo-design/> (01.11.2018).
- [2] Meaning and Uses of Colors in Logo Design [Online]. Available: <https://blog.logodesignguru.com/meaning-and-uses-of-colors-in-logo-design/> (01.11.2018).
- [3] WordPress [Online]. Available: www.wordpress.com (01.11.2018).
- [4] Amazon Web Service [Online]. Available: <https://aws.amazon.com> (01.11.2018).
- [5] Ubuntu documentation [Online]. Available: <https://help.ubuntu.com/community/WordPress> (01.11.2018).
- [6] Amazon EC2 Instance installation [ONLINE], <https://aws.amazon.com/>, 2018
- [7] WordPress [ONLINE] <https://help.ubuntu.com/community/WordPress> (01.11.2018).
- [8] Customization of Domain Name [ONLINE], <https://aws.amazon.com/>, 2018
- [9] http://codex.wordpress.org/Changing_The_Site_URL.(01.11.2018).
- [10] AWS Certificate Manager [ONLINE], <https://aws.amazon.com/>, 2018
- [11] <https://docs.aws.amazon.com/acm/latest/userguide/acm-overview.html>(01.11.2018).
- [12] How to Write a Good Vision Statement [Online]. Available: <https://www.executestrategy.net/blog/write-good-vision-statement/> (01.11.2018).
- [13] The Leader's Guide to Corporate Culture [Online]. Available: <https://hbr.org/2018/01/the-culture-factor> (01.11.2018).
- [14] How To Set a Great Mission and Vision - Perdoo [Online]. Available: <https://www.slideshare.net/HenrikJanVanderPol/how-to-set-a-great-mission-and-vision-perdoo-for-slide-share> (01.11.2018).
- [15] The Internet of Things (IoT) Vision [Online]. Available: <https://blog.equinix.com/blog/2015/03/12/the-internet-of-things-iot-vision/> (01.11.2018).
- [16] Wikipedia [online] https://en.wikipedia.org/wiki/Microsoft_Project (30.11.2018)
- [17] Trello [online] <https://trello.com/webind1/home> (30.11.2018)
- [18] Slack [online] [https://en.wikipedia.org/wiki/Slack_\(software\)](https://en.wikipedia.org/wiki/Slack_(software)) (30.11.2018)
- [19] Html, CSS & Bootstrap Framework [online] <https://en.wikipedia.org> (30.11.2018)
- [20] PHP [online] <https://en.wikipedia.org/wiki/PHP> (30.11.2018)

- [21] Javascript [online] <https://en.wikipedia.org/wiki/JavaScript> (30.11.2018)
- [22] JQuery [online] <https://en.wikipedia.org/wiki/JQuery> (30.11.2018)
- [23] Mysql [online] <https://en.wikipedia.org/wiki/Mysql> (30.11.2018)
- [24] Solid [Online]. Available: <https://solid.inrupt.com/> [Accessed: 28.11.2018].
- [25] Solid [Online]. Available:<https://solid.mit.edu/> [Accessed: 28.11.2018].
- [26] Solid, "Solid Specification", 2018. [Online]. Available: <https://github.com/solid/solid-spec> [Accessed: 28.11.2018].
- [27] Wikipedia , "Medical record", 2018. [Online]. Available: https://en.wikipedia.org/wiki/Medical_record
- [28] [Accessed: 28.11.2018]. https://en.wikipedia.org/wiki/Medical_record
- [29] A brief history of the music industry <http://www.musicthinktank.com/mtt-open/a-brief-history-of-the-music-industry.html> [Accessed: 28.11.2018]
- [30] History of the music industry[Accessed: 28.11.2018]
<https://www.timetoast.com/timelines/history-of-the-music-industry-ebc0e008-9058-46e0-8005-cbb6cc249a6f>
- [31] Are apps the future of the music industry?[Accessed: 28.11.2018]
<https://www.imusiciandigital.com/en/are-apps-the-future-of-the-music-industry/>
- [32] Is the music industry headed for revolution?[Accessed: 28.11.2018]
<https://www.imusiciandigital.com/en/music-industry-headed-revolution/>
- [33] The 3 hottest topics at Eurosonic Noorderslag 2015[Accessed: 28.11.2018]
<https://www.imusiciandigital.com/en/3-hottest-topics-eurosonic-noorderslag-2015/>
- [34] COPYRIGHT AND INTELLECTUAL PROPERTY[Accessed: 28.11.2018]
<https://www.ukmusic.org/policy/licensing-solutions/>
- [35] GDPR [Accessed: 28.11.2018] <https://eugdpr.org/>
- [36] Meet Inrupt interview[Accessed: 28.11.2018] <https://www.i-scoop.eu/inrupt-decentralized-web-data-ownership/>
- [37] Paradigm shifts forthe decentralized Web [Accessed: 28.11.2018]
<https://ruben.verborgh.org/blog/2017/12/20/paradigm-shifts-for-the-decentralized-web/>
- [38] DIDI and Kuaidi tie up[Accessed: 28.11.2018] <https://www.reuters.com/article/us-china-taxi-merger/china-taxi-apps-didi-dache-and-kuaidi-dache-announce-6-billion-tie-up-idUSKBN0LI04420150214>
- [39] Vertical integration[Accessed: 28.11.2018]
https://en.wikipedia.org/wiki/Vertical_integration



[40] Vendor lock-in [Accessed: 28.11.2018] https://en.wikipedia.org/wiki/Vendor_lock-in

[41] Niche market[Accessed: 28.11.2018] https://en.wikipedia.org/wiki/Niche_market

[42] Gilbert/Strebel (1991)Strategien für neue Geschäfte: ein Konzept zur strategischen Suchfeldanalyse für Umweltdienstleistungen

[43] IBM Design Thinking [online] <https://www.youtube.com/watch?v=pXtN4y3O35M> (30.11.2018)

[44] Business plan at first glance[YOUTUBE-online]
<https://www.youtube.com/watch?v=Fqch5OrUPvA> 26.12.2018

[45] Strategic IT Management Prof.Barbara Dinter [Literature: Page11 Hofmann/Schmidt, 2010 and Laudon et al., 2009]

[46] How to write business plan [youtube -ONLINE]
<https://www.youtube.com/watch?v=Fqch5OrUPvA> 1.10.2019

[47] Business Planning for Startups & Entrepreneurs [youtube -ONLINE]
<https://www.youtube.com/watch?v=9jIEfX0lct8> 1.10.2019

[48] scaling startup [youtube -ONLINE]
https://www.youtube.com/watch?v=DL_6UKiWnwg 1.10.2019

[49] Market Research for Startups [youtube -ONLINE]
<https://www.youtube.com/watch?v=O540vU7w2Kk> 1.10.2019