**Alcoholic Support System**

**1.Customer segments**

**a. Alcoholics who want to remain anonymous in their treatment.**

The alcoholic patient dropout rate is 76% in hospital and rehab. The number one reason is privacy as these people do not want to be seen in a rehab center or alcoholic treatment hospital. People who get alcoholism suffer a lot, and usually they don't want anyone else to find out these facts, especially celebrities, who are seriously concerned about their reputation. Celebrities' going to the hospital or rehab center for treatment could always be discovered by reporters or ordinary people, then it won't be secrets any more among the society, which is quite harmful to the treatment process because patients have got negative feelings about themselves and the treatment itself. Even not famous people who get alcoholism will not be pleased when anyone except his/ her parents is talking about his/ her passive life, which is an important cause of people dropping the alcoholism therapy. So, it is important to keep the whole cure process anonymous, even the doctors or therapists do not know exactly who the patients are. All the doctors or therapists care about are the information of the physical and psychological symptoms of the patient's' body as well as their medical history.

**b. Alcoholics who cannot persist the rehab program because of time and place inconvenience.**

About 80% of people with an alcohol use disorder will relapse within the first year of sobriety[1]. It requires a long term solution rather than a short one. One of the reasons of high alcoholism therapy dropout rate is inconvenience. People who have a disease still need to work, especially when it is the early stage of alcoholism. In the meantime, alcoholics need to see the doctors or therapists several times in a month or even in a week because of the self-control malfunction. Alcoholic patients need to be supervised and reminded in some way. It takes patients large amount of time to make appointments and schedules to consult a doctor as well as commute from home to hospital. Since a course of treatment may last for months or longer, it becomes really difficult for patients to hold on to get sobriety eventually, especially for businessmen or entertainment celebrities, who are always in a busy condition or live in no fixed homes.   
So, it may become workable and sustainable when the treatment between patients and doctors could be processed nearly anywhere and anytime.

**c. Alcoholics who cannot persist the rehab program because of the difficulty of treatment.**

About 80% of people with an alcohol use disorder will relapse within the first year of sobriety[2] . It requires a long term solution rather than a short one. Another reason of high dropout rate is it’s too hard to consist and keep sobriety from addiction. It is an inevitable scientific problem for any addiction including drugs and alcohol. If someone or some groups could motivate his/ her mind to insist, or there are some professionals to guide him/ her, he/ she would have more possibility to finish the whole treatment.

**d. Alcoholics who are not rich enough to see a good doctor or alcohol use disorder therapist.**

Nowadays, effective and valid treatments are usually expensive. Rich people are capable to explore different possibilities to regain new lives, but poor ones are not. Majority of hospitals are for profits, and only county hospitals could be non-profit. They cannot go to expensive profit-making hospitals or even go for non-hospital rehab residential treatment. An example is Cliffside Malibu, which guarantees the treatment works and costs over 73,000 dollars a month, while Four Seasons costs about 40,000 dollars. Celebrities go there for help maybe because it works better than going to the hospitals. Middle- or lower-income immoderate drinkers tend to abstain completely, or to drink heavily. When they get addicted to alcohol, their lives are ruined since they have no available money to ask a doctor for help or no insurance cover. (Of course there is still one way to go, the AA 12-step method.) [2] So, decreasing the cost of the therapy is necessary for poor alcoholic patients to afford it.

**e. Alcoholics who have no idea where to find a certificated therapist for their alcoholism.**

Cases exist that people spend a lot of money on useless treatment provided by irresponsible rehab center. Poor people are fucked by addictions. Many recovery/ treatment center do kickbacks and don't treat patients well, even some of the patients died after their family paid a lot of money because the centers' negative acts. [2] So, it would be promising for desperate patients or families to have a platform that connects the qualified doctors and them.

**2.Value proposition**

**a. Customer’s Problem**

Since we have analyzed the customer segments, we can see there exists problem including **privacy about treatment, inconvenience of treatment, price of treatment, patients’ persistence, doctor finding channel** problem in patients’ treatment of alcoholic disorder.

Besides, there exist a lot **of problems in traditional treatment methods** of alcohol use order. The traditional ways to cure alcohol use order are behavioral treatments like counseling doctors or psychologists, using prescribed medications to combine with counseling, mutual- support groups like Alcoholics Anonymous(AA)[3] where people self-organize a group to provide peer support.  The first problem is, there exists some report that says AA is not useful, someone says it’s useful, we cannot deny the positive influence made by AA. The second problem is, all of them require patients’ offline participation. For counseling part, it requires more time to wait and reserve an appointment with a doctor, for medications, patients also have to buy them outside. for mutual-support group, it’s not very flexible to organize a meeting or have conversation with other people.

**b. Our Solution**

Based on the customer’s problems above, we have included different solutions in our product to solve every sub problem above.

**(1) Solutiom1** **Doctor, Health Professionals, Psychologists Matching**

Solution1 is to solve alcohol use order treatment itself and offer **convenience** to patients, since we need professionals to help a patient to cure their disorder, our system can help users to match a doctor and reserve a treatment basing on user’s insurance plan, users’ preference for doctors’ background, users’ symptoms, users’ special needs, users’ available time and so on. Since this is a customer to customer ecommerce, there will be competition among doctors, and users don’t have to pay for hospital or centers, users can enjoy a **lower price** for treatment.

**(2) Solution 2** **Private Information Interaction and Storage**

To solve **privacy problem**, our platform must make sure the privacy of the patients by make robust security technical solutions to optimize the interaction and storage of our information system. Besides, for relationship part, we also need to come up with reasonable strategy to deal with the relationship between patients and doctors like defining which information is necessary for treatment, how to sign the agreement with doctors to make sure the privacy of every treatment

**(3) Solution 3 Online Drug Store and Convenient Drug Delivery**

To optimize the **efficiency and convenience** of our product, our company can cooperate with drug stores or companies which can offer drugs focusing on alcoholic disorder treatment. Every time user get prescription from doctors, they can directly buy drugs from those companies at home

**(4) Solution 4 Online Social Networking for Mutual Support**

AA is a historic organization followed by many patients to organize meeting or activities to support each other to beat against disorder, but it’s not efficient, our platform can directly offer social networking to patients for them to freely have conversation and exchange ideas with each other. Plus, building a social networking for patients can help to build a more positive community for patients to get more information about treatment more **efficiently and quickly**.

**c. Our Value**

Above all, our core values are as follow:

**(1) Privacy guaranteed.** Patients can access a certificated doctor via mobile app at home, instead of stepping into a hospital.

**(2) Convenient and patient-friendly.** Patients can consult a doctor via mobile app, order drugs online with the e-prescription signed by the doctor and get drugs delivered directly to their home.

**(3) It’s efficient.** Patients can encourage each other and share recovery progress via the social network provided by our app. Patients can also get notifications when it is time to report their condition to their doctor.

**(4) Affordable.** The consulting service will be cheaper since all charges will only be distributed to the doctor and our platform itself, compared to the situation of consulting a doctor in hospital, where the charges will be distributed to the hospital. We will also try to cooperate with insurance companies and release new insurance plans which will cover the fees of consulting a doctor via our platform.

**(5)Accessible.** Doctors on our platform must be verified as official qualified doctors. We provide a guaranteed consulting service which is accessible to all patients with a mobile phone.

**3.Channel**

**a. Partner Channels.**

Doctors: Doctors can help us to promote our product by recommending the mobile app to their patients.

Hospitals: We can also cooperate with the hospitals to transfer some patients with a better health condition to be treated online.

Pharmacies: If we want to deliver the prescribed medication to the customer directly, we need to build a close connection with the drug companies or some local pharmacies.

**b. Awareness – How do we raise awareness about our company?**

Create a social media presence. Social media sites such as Facebook and Twitter can be vital tools in developing brand awareness where consumers share their user experience, including their purchases and treatments they like.

**c. Evaluation – How do we help customers evaluate our organization’s value proposition?**

In our app, there will be a function in which patients can rate the app.

**d. Purchase – How do we allow customers to purchase specific products and services?**

After matching with a specific doctor, patients can purchase different plans, such as a course of treatment, real-time online consulting (phone calls) and not prompt asking questions. Prescribed medication can be delivered to their patients’ home or picked up at a local pharmacy.

**e. After Sales – How do we provide post-purchase support?**

Invite customers to give feedback of the effects of their treatment or share their experience of getting treated and encourage them to become the outstanding leader of the mutual-help group.

**4. Customer relationship**

**a. Customer acquisition**

We recommend our products to doctors and teach them to create their profiles on the website and invite their patients to use the website. Publish the app on the app store.

**b. Customer retention**

A treatment calendar:

(1) remind the patients of promptly reporting their conditions of illness on the website

(2) inform patients’ information to their corresponding doctors to review, which indirectly encouraging them to keep treatment.

**c. Boosting sales**

Contact mutual-help groups to combine professional treatment of doctors with spiritual treatment like 12-step method.

**5. Key activities**

**a. R&D, functions:**

**Develop web/Android applications**

We will develop a web/Android application whose users are doctors and alcoholic users.

**Set up database to store user info. (private/public)**

The doctors’ information includes their education background, their current position and working place, their previous working experience, their charging range, their area (which means a specific patient type) of expertise and etc. The patients’ information includes their age, their gender, their job, their reasons for drinking, their insurance plans, their acceptable consumption level and etc. The doctors’ information will be displayed on the app so that all patients can select and have a basic idea of who is advising them. While the information of patients will only be stored in database and will not be displayed publicly. Patient users may choose a nickname for themselves when registering an account.

**Match a doctor with patient**

We can match an ideal doctor for a specific patient. According to the information stored in our database, we can match them by charges standard, patient’s type and drinking reasons. With more and more ratings given by patients in our app, we can collect those data and sort out which specific type of patients rate highest for this doctor, so that we can recommend this doctor to a similar patient next time.

**Charging process**

Both patients and doctors have an expected charges range when registering an account. They will discuss about the specific amounts of fees according to the situation of this patient and make agreements with each other.

**Text mining**

With more and more messages being sent between doctors and patients in our app, we can store all those data for mining which specific ways have better influence on patients, or what kind of advice do doctors usually give under a specific situation (so that we can have text recommendations when doctors type).

**Social network**

We may cooperate with A.A. and gather their members as our potential users. Details will be discussed later.

**Online pharmacy, deliver prescriptions.**

Patients can order drugs prescribed by doctors online, with the electronic prescription given by doctors. We cooperate with pharmacies or drug factories for delivery service.

**Redirect to Google Map API to locate nearby estate pharmacies.**

For patients who do not want to order drugs online, we can provide a redirection link to Google Map to help them find nearby pharmacies.

**b. Advertise**

Talk to doctors, convince them to recommend our app to their patients

Talk to A.A., since we can provide an online platform for A.A. members to share posts with each other, which keeps privacy and is more efficient.

**c. Cooperate with other organizations**

**Cooperate with insurance companies**

Talk to insurance companies to see if their insurance plan can cover the cost of seeing a doctor via our platform. Since our platform charges less than hospitals, it is more acceptable for insurance companies to cooperate with us.

**Cooperate with pharmacies**

Talk to pharmacies for our drug delivery service. Doctors will send an electronic prescription to the patient. If the patients choose to order drugs online, they can make the order by attaching the e-prescription signed by the doctor. After verifying the e-prescription, the order is successfully made and drugs will be delivered directly to an address set by patients.

**Cooperate with organizations, such as A.A.**

Talk to anti-addiction organizations such as A.A. Since the treatment method of A.A. is the 12-step theory[4] and the mutual encouragements between alcoholics via face-to-face anonymous meetings, our application provides an online platform, e.g. social network, to allow members of A.A. to talk and share feelings with each other, and encourage each other more efficiently and more privately.

**d. Teach doctors to use**

Teach doctors to register an official verified doctor account, and convince them their personal data will never be disclosed to other sources.

**6.Key resources**

**a. Overview**:

The key resources of our plan includes:

Engineers who are good at mobile and web development

Engineers who have the advanced natural language processing(NLP), and machine learning skills.

**b. Mobile and web development engineers:**

Our product is shown as mobile APPs and webpages, which could be used anywhere and anytime to pair the doctors and patients. Thus the design and testing of web application should require human resources, especially the software developers who have the skills in developing the frontend and backend mobile Application and web page.

**c. Text mining and machine learning engineers:**

Besides the paring application, we also need text mining to discover relevant information in text by transforming the text into data that can be used for further analysis. Text mining accomplishes this by using a variety of analysis methodologies; natural language processing and machine learning technologies. By using the text mining, we can analyze the habit of the patients and doctors, to make improvement of the pairing process.

In addition, we can help the doctors to make a better more precise diagnosis by mining the large amount of patients’ data. This could highly improve our users’ experiences for both doctors and patients. Therefore we need engineers who have the experience in data analysis and machine learning technologies. These engineers could highly improve the value of our applications, which may hit the market by our intelligent pairing and recommendation systems.

**7. Key partnership**

**a. Overview**:

The key partnership of our plan involves :

**Healthcare providers**: relationships between buyers and suppliers.

**Alcoholics Anonymous**: institutes for cooperation

**Insurance company**: institutes cooperation

**Pharmacy**: joint ventures

**b. Healthcare providers:**

Problem drinking that becomes severe which is given the medical diagnosis of “alcohol use disorder” (AUD). AUD is a chronic relapsing brain disease characterized by compulsive alcohol use, loss of control over alcohol intake, and a negative emotional state when not using. An estimated 16 million people in the United States have AUD. Approximately 6.2 percent or 15.1 million adults in the United States ages 18 and older had AUD in 2015. This includes 9.8 million men and 5.3 million women. Adolescents can be diagnosed with AUD as well, and in 2015, an estimated 623,000 adolescents ages12–17hadAUD[5].Hospitals could help us have access to customers, i.e. patients and doctors. The solution is to connect as many patients as possible to healthcare providers. The startup will keep a partnership with several hospitals and health plans for their treatment. [6]

**c. Alcoholics Anonymous:**

Alcoholics Anonymous (AA) is an international fellowship of men and women who have had a drinking problem. It is nonprofessional, self-supporting, multiracial, apolitical, and available almost everywhere. Membership is open to anyone who wants to do something about his or her drinking problem. These people who are the members of AA is highly our target customers for the following reasons: [7]

The number of AA member are huge, which close to 2 million people worldwide are members of AA as of 2016. This means that we have a large customer market.

The AA member are those who have the willing to change and control their drink habit which are willing to consult the doctor for professional guidance. This is because according to AA's 2014 membership survey, 27% of members have been sober less than one year, 24% have 1–5 years sober, 13% have 5–10 years, 14% have 10–20 years, and 22% have more than 20 years sober.

AA members is as their statement claims that everyone is association is anonymous, so they want to have a private treatment from the professional doctors but are afraid be tracked by other people. Therefore, they are in need of our product, which could pair them with doctors in a private way.

**d. Insurance company:**

Most people’s health insurance policies will not cover all alcohol abuse treatment or rehab expenses. Typically, they are still have some out-of-pocket costs.[8]  
The costs of a rehab program vary widely by the type of treatment center. Some recovery options, such as programs from non-profit health centers, are entirely free while luxury centers for celebrities might cost up to $80,000 a month. Most standard drug treatment centers fall somewhere in the middle, from $2,000 to $25,000 a month. [9]   
Since we provide a private way via technology to match patients and doctors, professional health experts in a private, accessible, convenient. Instead of having to visit a clinic, the patients can work with a doctor, and therapist, over their mobile phone. It is much cheaper and more efficient making it attractive for health insurance to cover the cost of service. This could reduce people’s cost and make them are more willing to use our product. In the meantime, the insurance company could also cover the treatment because of the low price.

**8. Cost structure**

**a. Fixed cost**

Since we have to implemented a web application and a mobile application, we need a server to interact with mobile application and we also have to deploy our web application directly on a server. Hence, the first and the most important cost for our business is the cost of cloud server. The cost of cloud server depends on how many active users we will have. Since we don’t have a lot of users at first, we don’t need to buy a high-performance server which costs a lot. When more and more users start to use our service and application, and flow become larger and larger, we have to update our server. For example, to increase the number of servers, some act as load balancer to distribute requests, some act as cache to store some static resources. To buy separate databases to store increasing user information, or to use CDN service. But, now, since it’s a MVP, we don’t think about those things.

**b. variable cost**

The first cost will be the cost of transportation to have conversation with different hospitals, different doctors, different organizations like AA, different centers and so on. Since it’s hard to decide how many interviews or conversations we will have, how many conversations are valid, this will be a variable cost.

The second, in the first stage of advertising our product, maybe we have to give additional rewarding to doctors, organization like AA or professional centers to advertise our products. However, since they also get benefit from our platform, this can be negotiated, which is also a variable cost

**9. Revenue stream**

According to Customer Segments and value proposition, there are 4 types of customers that are willing to pay for our customer, including patients who ask for convenience, privacy, lower price and lack of methods to find certificated therapist. To solve this problem, we offer features like doctor matching, online medicine store, social networking.

**a. Brokerage Fees**

Brokerage fees are revenue generated from an intermediate service between 2 parties. Both of revenue from doctor matching and online medicine store belong to this class

For doctor matching, our solution in value proposition is to match a patient with a doctor basing on their preferences privately, and make treatment directly online to make it easier and more convenient to proceed. In this business model, it’s a customer to customer ecommerce. A customer, who is a doctor in our case, sells service, which is treatment of alcoholic disorder, to another customer, who is a patient. This personal transaction makes it more convenient and private for customers who buy this service. And our site act as intermediary who match doctors with customers, and we get amount of money from fees or commissions charged to doctors as our incoming. Since there exist competition among doctors and users don’t have to pay for other fees when they have treatment in a real center center or hospital, which means users can pay at a lower price.

For online medicine store, after every diagnosis made by doctors, patient will get the prescription from the doctor and it can be sent to medicine store we cooperated with online directly in our platform to buy drugs legally. Compared to the previous one, this is a business-to-customer ecommerce, drug store or drug company sell their product which focuses on alcoholic disorder to customers. Since we cooperated with drug company or drug store, they pay us a percentage of every sell, we offer them a new place to sell their drugs. Meanwhile, users are happy with online shopping and convenience of “buying directly”, the sale of drugs can increase which can give us more benefit.

**b. advertising fee**

Advertising fee are revenue generated from charging fees for product advertising. For social networking, since we replace traditional community like AA with a more efficient platform for patients to contact with each other. When we have gathered enough users in our community. We can cooperate with some drug companies or centers to make ads about them and get ads fee for this.

**Reference**

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