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Vellore Institute of Technology

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SYMPHONY

Project Report

Lean Start-Up Management

(MGT-1022)

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CERTIFICATE

This is to certify that the project work entitled –SYMPHONY|| that is being submitted by the above mentioned team members for Lean Start-Up Management (MGT1022) is a record of bonafide work done under my supervision. The content of this project work, in full or in parts, have neither been taken from any other source nor have been submitted for any other CAL course.

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1.Executive Summary

a) INTRODUCTION

Symphony is an Augmentative and Alternative Communication (AAC) app for children with speech difficulties. Symphony gives a voice for these children, to help them express their needs, wants, thoughts.

The app will run on tablets (iOS, Windows and Android compatible). The child can use either pictures or text (through a keyboard) to express himself. He can use Symphony to string a set of words together and can tap on a box for the app to speak it out, on his behalf.

Symphony is very easy to use and does not require much training / practice to start using it. It has customizable picture vocabulary and also predicts words according to history. Video tutorials for all basic features are provided along with a 24x7 Live Chat for customer support.

SPECIFIC ISSUE

It is useful for children with Autism (and Autism Spectrum Disorder), Cerebral Palsy, Intellectual Challenges, Down Syndrome, Angelman Syndrome etc.

Children, who are unable to speak, face social and educational isolation as well as frustration because they are not able to communicate their needs, desires, knowledge and emotions. Cerebral palsy is one among the various neurological impairments that impede speech and language development

The project more than a being a challenge of app development and machine learning is a challenge of creation of a proper business model. The problem the app aims to address is unique and unparalleled, something that if implemented at a large scale will start a new way of helping the disabled and autistic children.

SOLUTION TO THE CHALLENGES (OUR STARTUP)

Our start up (Symphony) can propose a major solution as it is one of the form of SGD (speech generating devices).It is very friendly and is very easy to use. We have a customer support center also which runs 24*7. The app runs in the tablet and the iOS systems.

Justification or Proving:

- Children with Autism Spectrum Disorder (ASD) is said to have qualitative impairments in verbal and non-verbal communication that severely affects their relationship with their families and others around them. It is also reported that 50% of individuals diagnosed with ASD do not speak but are highly visual-oriented with the presence of strong visual-spatial skills. This is supported by research studies that found persons with ASD responded better to visual based stimuli compared to auditory-based stimuli.

The flexibility and capability of the computer to store, use and retrieve high volume of still and moving visuals makes the machine rather engaging for children with ASD.

It seems like a perfect match between computer technology and children with ASD.

Computers are emotionally and socially neutral and this addresses the anxiety that children with ASD typically experience when trying to communicate with other people in person or in unpredictable social environments

Requirements for the Startup:

- It will require a good market platform.
- Initial funding.
- Technologically updated.
- A good advertisement and publicity.
- Sometimes for funding the government schemes and crowd funding can be used.
- A group of excellence technicians and members.

2) Company Description

a) Company Name

The name of our app is Symphony. Symphony is an Augmentative and Alternative Communication (AAC) app for children with speech difficulties

b) Objectives

- 1.The idea behind Symphony is to provide a mode of communication to people through typing and pictures.
- 2.Symphony will be designed to improve communication for people with special needs by using pictures to form sentences which can be understood by the other person.
- 3.Symphony will be useful for overcoming language barriers between people.
- 4.It can be used by people with verbal disabilities and by people who wish to communicate with people having hearing disabilities.
- 5.It is useful for children and adults who are non-verbal or having delayed or unclear speech, or single-word communicators, developmental delays etc. It gives voice to the people using an app

c) Form Of the business

Re-segmentation of an existing market by employing a niche strategy

d) Trademarks Copyrights and Other legal Issues

The app transacted through the service will be licensed, and not sold. The app will be for use

only under the terms of this license. This license granted to the customer will be for the Licensed Application by Application Provider which would be limited to a non-transferable license to use the Licensed Application on any tablet. The license does not allow to use the Licensed Application on any tablet that isn't owned or controlled by the customer, and the customer may not distribute or make the Licensed Application available over a network where it could be used by multiple devices at the same time.

e) Services

The app will run on tablets (iOS, Windows and Android compatible). The child can use either pictures or text (through a keyboard) to express himself. Symphony uses picture symbols and high-quality voice synthesis to help users create messages

Symphony is exceptionally easy to customize, and comes with A high-quality voice. One can even record its own voice! Symphony takes the hassle out of 'programming' a typical AAC aid, and keeps the focus on interacting with the child.

- 1) Seamless Integrated Text and Keyboard Mode
- 2) Word prediction with both pictures and text
- 3) Instant Search to explore vocabulary easily
- 4) Consistent
- 5) Motor Planning
- 6) Grammar
- 7) Add/Edit multiple items at once
- 8) No active internet connection (Wi-Fi or 3G) required

f) Management

The delegation board is used as a way to spark discussion on how they decide who to hire and who to bring into the business for a partner.

We intend to Foster Self - Organization and Authorization. To that, a team contract will be created that will cover how the team will

- a) Communicate
- b) Where they will work, how to handle remote work
- c) Tools that we would use
- d) Concerns, fears
- e) Consequences
- f) Roles
- g) Time

g) Location and geographical information

Since this is an online app can be used anywhere any time.

h) Development stage

As the idea is pitched soon the platform would be created, funding would be organized and the startup would be put in the track.

i) Milestone achieved to Date

1) Profitable Business Model

Since we came up with this idea recently, we have gone through the advertisement part and crowd funding part also using the various platforms like wishberry and ketto

2) Realistic, Scalable Marketing

Strategy

3) Hire and Train a Solid Team

j) Financial status

As of now

Advertising and Promotion

Borrowing Costs.

3.INDUSTRY ANALYSIS AND TRENDS

a) Size and growth rate of industry

- Free in-app purchases, but advertisers are charged to display these to the users.
- App store optimization: Under app store optimization we have:
 - i) Generating referrals which will help increase the network quickly.
 - ii) Having a core team which keeps up with the market trends and forms strategies based on that.
 - iii) Studying and tracking the feedbacks, complaints from consumers to come up with better user experience.

b) INDUSTRY MATURITY

- During the launched phase, the business is highest as sales are comparatively low. During this phase, it is impossible for a company to finance debt due to its unproven business model and uncertain ability to repay debt. With time, as the sales of the product increases, the company's ability to finance debt also increases.

c) Seasonal factors:-

As it is an app based product seasons have no effect on the product and it can be used throughout the year.

d) Technological factors:-

Speech difficulties. Symphony gives a voice for these children, to help them express their needs, wants, Symphony is a Communication app for children with thoughts and feelings through the app. It is useful for children who are non- verbal or have delayed or unclear speech, or single word communicators, developmental delays etc. It is useful for children with Autism, Cerebral Palsy, Intellectual Challenges, Down syndrome, Angelman Syndrome etc. The app will run on tablets (iOS, Windows and Android compatible). The child can use either pictures or text (through a keyboard) to express himself. He can use Symphony to string a set of words together and can tap on a box for the app to speak it out, on his behalf. Symphony is very easy to use and does not require much training / practice to start using it. Its services are offered in various languages. It has customizable picture vocabulary and also predicts words according to history. Video tutorials for all basic features are provided along with a 24x7 Live Chat for customer support.

With gradual improvement in technology the app will be further enhanced and will become more convenient to use.

e) REGULATIONS/CERTIFICATIONS:-

- Working for keeping all students safe act, legislation regulating restraint and seclusion.
- Working to increase funding for individuals with disability education act.
- By advocating at the federal level, the autism society is assuring each individual diagnosed with a development disability will always be provided full opportunity to live his/her life as independent as possible and always respected, failure and assured over the highest level of dignity.

f) Supply and distributions

- The app is a cross platform app and will be available on both play store as well as ios app store for both android and ios devices. The link to download our app will be made available on our official website for both platforms.
- The app can be made available in hospitals and can be distributed to patients who do not possess any knowledge about the app.
- Our team engages with people and spreads awareness through advertisements and campaigns allowing the interested people to look into it.

g) Financial characteristics:-

- Initially the mode of generating revenue is through in – app advertisements only. Consumers can further opt for paid version i.e free from advertisements along with some additional features.

h) Anticipated changes and trends in industry:-

- Finding inexpensive methods to cover up the unnecessary expenses by hiring less costly developers.
- Modification of the app based on the received feedback from our consumers.
- The team is used in handling different projects simultaneously.
- Tempting discounts which make the consumer want to buy more features but also have a necessary and additional fee payment which reveal themselves later.

i) Global industry concerns:-

- To reach out globally the only possible is through internet. Multiple social media platforms such as facebook, twitter etc can be used to create awareness among the people and advertise the product. Blogs can be written regarding the product uses and its utility that will be read by the people to enlighten them on the issue and also simultaneously create awareness regarding the issue.
- Symphony offers the global community a comprehensive array of affordable resources to virtually anyone with internet connection

4) TARGET MARKET

a) Demographics / Geographic

- Autism is considered as a great problem in the market.
- Autism (and Autism Spectrum Disorder), Cerebral Palsy, Intellectual Challenges, Down Syndrome, Angel man Syndrome The main target population for our project are the children suffering from these disorders
- Similarly, this app needs to be advertised and made available in the areas where the population of such group of people is more.
- Autism affects around 3 million people in the Indian subcontinent, and is being increasingly recognized as an important issue.
- Hence, to start with we have taken India as the target area for our start up

b) Lifestyle and Psychographics

- Roughly 23 of every 10,000 children in India have autism, according to the first rigorous estimate of the country's autism prevalence
- Even though there has been a vast increase in the number of cases being detected, majority of people with autism in India, still remain undiagnosed, and do not receive the services they need.

- Usage of these sort of apps still is not favored by the consumers to the large extent, which needs to be changed
- It is obvious that that any individual will want to express themselves and this app can be a medium for that.
- This ensures us that it is highly necessary to take our application to every individual in it's need.

c) Purchasing Patterns

- The demand of these sort of apps is increasing these days.
- Once our application is purchased, this will work for an individual throughout the lifetime.
- Hence, there is no specific frequency or duration in which our application needs to be purchased.
- The people having different verbal problems are the ones who will be purchasing our application

d) Buying Sensitivities

- The idea of the application is not that well known by many people in India.
- Many people even do not know if such things exist.
- It will be very hard for us if we put the values of the items in an expensive price from the beginning.
- According to the reviews by costumers in play store, price range between IRS 5000-8000 is found out to be more feasible among the costumers.
- We have to make our product value in that range in order to get going in the market
- We have also planned to give a few months of trial to the costumers to ensure that they will be paying value for money

e) Market size and trends

- The market size for our product is very high as there is a huge amount of verbal problems people present in India, who are our target markets.

- It is very important for a child using AAC (Augmentative and Alternative Communication) that he should be in constant touch with this form of communication to increase their learning curve and familiarity with process.
- Hence, parents and teachers for such children need to learn the use of the device in order to aid their child and communicate with them.
- As our company needs to be started, we have decided to start from children. Approximately, 2 million children are having some sort of verbal problems.
- No regular caretaker is required by the usage of our app as the person using it can speak by themselves.
- The trend of these sort of apps is growing day by day but yet to take the market in the way it needs to be.

5) THE COMPETITION

a) Competitive position

Children with autism spectrum conditions often have trouble recognizing the emotional states of people around them — distinguishing a happy face from a fearful face, for instance. To remedy this, some therapists use a kid-friendly robot to demonstrate those emotions and to engage the children in imitating the emotions and responding to them in appropriate ways.

Researchers at the MIT Media Lab have now developed a type of personalized machine learning that helps robots estimate the engagement and interest of each child during these interactions, using data that are unique to that child.

b) Global competition

Symphony's approach is different. It has been designed with an effort to make it available online. Symphony takes a lot of data and converts it into a small set of rules which can capture the pattern in this large amount of data. Symphony focuses on capturing linguistic patterns from this enormity of data and using those patterns to express language.

c) Future competition

Companies like Google are working extensively on language technologies, powered by artificial intelligence and machine learning which could aid people with verbal disorders. However, Google products need to pull in information from the cloud at a real-time basis. By getting lots of apps on the same stuff, we should also develop the app in the advance level

d) Barriers To Entry

Many more apps have been started, where students can play video games or social media like facebook, Instagram, youtube. A snooker club also exists and

is a favourite of many students. All these apps prove to be a huge competition to our app.

6) STRATEGIC POSITION AND RISK ASSESMENT

a) INDUSTRY TRENDS

- Usage of these types of applications is not common in the real time now, but with advertisement and publicity it can be made famous.
- Our application is a simplified form such that it will be easier for the users.
- In addition to the usual functions, we are also planning to add other functions for other differently abled people.
- There is a huge competition in this field, as many application are present in the play store along with other operating systems.
- There are no specific government norms and rules regarding these applications, however cyber security and web related rules must be followed.
- Our organization requires minimal amount of field work except for the market research and advertisement and most of the work is carried from the office.

b) TARGET MARKET

- Autism affects around 3 million people in the Indian subcontinent, and is being increasingly recognized as an important issue.
- Roughly 23 of every 10,000 children in India have autism, according to the first rigorous estimate of the country's autism prevalence
- There is no specific frequency or duration in which our application needs to be purchased.
- According to the reviews by costumers in play store, price range between IRS 5000-8000 is found out to be more feasible among the costumers.
- As our company needs to be started, we have decided to start from children. Approximately, 2 million children are having some sort of verbal problems.
- No regular caretaker is required by the usage of our app as the person using it can speak by themselves.

c) COMPETITIVE ENVIRONMENT

- Several competitive applications present in the play store regarding the same solutions
- Proloquo2Go – Symbol-based AAC, Birdhouse for Autism., I Can Have Conversations With You! are some of the applications with good costumer reviews.
- Along with the above mentioned direct competition, we also have some indirect competition.
- The care centers for autism affected children can be considered as our indirect competitors.
- Although there is a high competition in the market, new ideas can help us to rise through the market

d) COMPANY STRENGTH

- Major strength of our company is the employee attitude.

- All the employee of our company are dedicated and passionate towards their work.
- We have decided to form a review team in order to listen to the problems of the costumers which can be beneficial to the costumers to a great extent.
- Our technical team is comprised of our friends such that the manufacturing cost will be low.
- Leadership is the main positive point of our company as all of us are leader within ourselves.

e) **RISKS ASSESMENT**

- The first and foremost risk for our startup is the existing applications that are present in the application stores.
- Similarly, the application might compromise of high technical applications which may not be applicable for all types of smartphones.
- With the above stated problems, costumers are the people who are going to affected along with our team.
- For the first type of risk, we have decided to have free trial system, which will ensure people how good our application is and we will have a good will of the company.
- Similarly, we have also planned to have a lite version of our application such that people will have it used in the low capacity smartphones as well.

f) **DEFINITION OF STRATEGIC POSITION**

- Game theory can be a good concept while making the strategic planning for our company. Based upon the possibilities how other companies will behave, we will make plans accordingly.
- If another company changes in the price of the product, then we will try to increase the amount of products in same price such that our customers will not be deviated.
- We have also implemented the system of participation of every individual in the decision making such that many ideas can be shared and the best one can be chosen in the process.

7) **Marketing Plans & Sales Strategy**

a) **Company's Message**

By this app our aim here is to make people comfortably speak with the Children with autism spectrum conditions and understand there emotional condition and support the physical and mental condition of the children easily and children also make themselves free to speak and understand the other person feelings

b) **Marketing Strategy**

- Eye catchy Tele ads

- We are planning to shoot an ad starring a common television artist we can afford.
- We giving ads in the top-grossing apps like pubg, zomata, swiggy, pokemon-go
- Make your app visible in app store.
- Start a blog.
- Measure your app KPIs.

c) Marketing Tactics

- Contest and scratch and win offers discount as well as other freebies
- Direct phone calls reaching all customers asking whether they are happy with the usage of app
- By keeping the goals in the app usage and offering a coupons
- Review taking by the usage of the people and developing and updating the app to make comfortable for the usage purpose

d) Strategic Partnership

- Establish Mobile App Partnerships for Social Video.
- Travel with Consumers on the Path to Purchase.
- Gain Attention through Augmented Reality.
- Encourage Brand Loyalty With Product-Level Mobile Rewards.
- Work With Emerging Voice-Search Platforms.
- Use Rewarded Video for Increasing Brand Recognition.

e) Online Marketing Tactics

- Blogs
Blogs being the 5th most trusted online resource read by over 409 million people are the best way to market our product. A good quality blog on blogspot with precise and eye catchy content will be published on a weekly basis
- Facebook page
Symphony, Facebook page will contain and share only relevant and valuable ideas like to action against environmental issues and a solution to our app. On reaching an advanced status we are planning to create our own Facebook page too.

- Public forums
Actively involving in public forums and group discussions in reddit and help to build an image for our company.
- Craigslist ads
Ads with right images published on craigslist reach over 600 million people every month and help to target localized market
- You tube
Videos on our launching, how to use the product and the speaking engagements are going to be put in you tube. We will also visit an symphony and post the videos to spread idea on our product

f) Sales Force and Structure

- Product based sales:
- Ours being a technical product in-depth knowledge about setting up as well as working of the device is necessary. We have a professional team who are experts in the production line making. We have a separate team capable of answering all the technical and complicated questions of the clients.
- Client based approach:
- Arranging app around the client to satisfy the specific need is one effective method of use.
- Customer sales force structure:
- We organize the app force along customer. Separate options forces may be set up for different customers, for serving current customers versus finding new ones, and for large accounts versus regular accounts.

8) Operation

a) Plants and facilities

It is available as an application in mobile phones (i.e. android and ios) .The app will be deployed on tablets which would be manufactured by hardware companies with which we collaborate. The tablets manufactured wouldn't be complex and would be compatible with only Symphony to maintain the simplicity of use of the device.

- Multilingual application
- Inbuilt training system
- Alert Button feature in the App
- customizable vocabulary
- Also available in android and ios

b) Manufacturing and production plan

A production plan is the guideline to create and monitor output of a product and how that output affects other parts of a business plan such as marketing, sales and logistics. A production plan is used to maximize the efficiency of company resources and to establish benchmarks for future projects.

- Forecast the demand
- Find out the option of production
- Most effective way of production
- Impact on market by the production method
- Impact on market by product type

c) Labor requirements

A technical team consisting of app developers, machine learning experts, UI/UX developers etc. would be required to develop and design the app. A team of doctors and therapists would be required to advice the team regarding medical aspects. A team of trainers for NGOs and parents for training purposes would be required.

- Sales: sales manager, sales person
- Development and research: app developer, machine learning expert
- Human resource department: human resource manager, supporting staff
- Advisor department: Medical staff, NGO's trainer

d) Capacity utilization

Capacity utilization refers to the manufacturing and production capabilities that are being utilized by an enterprise at any given time. It is the relationship between the output produced with the given resources and the potential output that can be produced if capacity was fully used.

Capacity utilization = $\frac{\text{Actual Output}}{\text{Potential Output}} \times 100$

The aim is to get the result of 100% in one year.

Within first few months it will be difficult to get a capacity utilization of more than 70% as there is more competition. As similar kind of startup and application are available in the market.

e) Quality control

We'll ensure that our collaborations are with hardware companies that manufacture good quality of tablets. Tablets would first tested before being distributed. They'll be manufactured with big screens to ensure the child's ease of use with technologies to prevent damage to eyesight on extensive use.

It is difficult to maintain the quality and to maintain a top position in today's market condition. It is must for the startup to maintain its quality. Some of the measures that we will consider to maintain the quality are:

- Review from users and consumers
- Time to time update
- Research
- Offers and health camp services after some period
- Free trial periods
- Marketing

f) Equipment and furniture

- Table, desk, chairs, sofa, cupboard, locker
- Internet connection
- Telephone system
- Photocopiers and Printers
- Computer Software
- Storage Equipment
- Collaboration Tools
- Office Waste and Recycling Tools

g) Inventory management

Inventory management is vital for the progress of the company. Effective inventory management should be done for the positive and good result. The things that we are more focusing for inventory management are:

- Forecast demand

- Prevent product and production shortage
- Keeping track of inventory in real time
- Optimize warehouse organization and precious employee time
- Going for multilocation management, (inventory across several locations or warehouses)

h) Supply and distribution

The app will be available on Android's play store and iOS's app store.

Those who wish to use the app on better quality tablets like iPad can download. The tabs that would be inherently deployed with Symphony will be available on our official website.

i) Order fulfillment and customer service

All the service which the customer's needs are to served on a priority and a first come first serve basis. The people with more severe problems will be provided as soon as possible. Else it will be given in the order in which they apply. In different places service center will be installed.

j) Research and Development

We will always keep on researching on the various services which can help the person know the problem and ease any kind of distress the child is in. This will give us the fastest and the best way with which we can help the person in question and keep them happy and healthy.

k) Financial control

- Keep business and personal finances separate.
- Conduct background checks before hiring.
- Create monthly cash flow projections.
- Review your business's monthly bank statements in detail.
- Review all credit and debit card statements for accuracy.
- Set up inventory control systems.
- Monitor point-of-sale transactions.
- Review all outgoing payments.

l) Contingency planning

- Change of marketing strategy

- Partner and sponsor

- Change of price

- Partner

- Trade partner

m) Other operational concerns

i) Monitoring performance

Assessment and monitoring of the performance of the employee. A separate group or department will also be formed for the assessing the performance of the employee. And also training will also be provided for the employee.

ii) Cyber risk

Rather than merely an IT issue ,cyber security is increasingly a risk for all business. If cyber security isn't properly managed, business leave themselves exposed to an increasing number of threats which can lead to data theft, hacks and other thefts. For that we are going to do following process:

- Encryption
- Purchase a cyber-insurance policy
- Use of antispyware software.
- Make backup copies.

9) TECHNOLOGY PLAN

a) Technology Goals and Positions

- The technological goals of our product “SYMPHONY” is to create a app for the physically disabled children suffering from diseases like autism. Symphony is one of its kind Augmentative and Alternate Communication (AAC) app which will help us communicate with the physically and mentally disabled children. It will help those people to have a voice of their own without being dependent on anyone.
- We aim to use the GOOGLE CLOUD PLATFORMS smart services to make our app highly efficient and include smart features like Google smart keyboard for correcting the wrong spellings and also help the text be converted to speech using text to speech api.
- We also aim to detect images and classify them using the gcp to help people communicate. We also aim to integrate a Voice API so that the user gets voice alerts of whatever he is doing. This feature will be like a emergency button which will help the parents know if the child is in any sorts of trouble or emergency.

b) Internet Goals and Plans

- We aim to increase the user base of SYMPHONY through proper advertisements and spreading our idea through online campaigns. Pop-up ads, YouTube video ads are an

integral part of promotion for our product.

- We also provide lucrative subscription plans which help to increase the popularity of our product. We are also planning to provide some trial versions for free to the general public to have a better understanding of user review and comfortability. Future plans include releasing app with its own hardware device which will be fully capable of using all the features of the app.

c) Software Needs

- For object detection, we are using MATLAB software. Other alternatives are doing it with Python APIs.
- We can build our app using the configured Linux environment on a Raspberry pi module.
- The Computer Vision libraries such as OpenCV are needed to be pre-installed on the system to perform the object detection and recognition activities.
- Apart from that we will be using our own model trained on Tensorflow for object detection.
- We will be using the google cloud platform for all the service api's we will be using

d) Hardware Needs

- Our hardware requirements need a mobile phone with basic configurations which will be enough for running our app.
- In future we will also be using our own hardware which can include a small microcomputer like raspberry pi and a small camera. All the software will be run on the computer and processing will be done on servers. We only need a computer as a medium of gathering and sending data.

e) Telecommunication Needs

- Call centers and direct customer interaction processes are required. This is primarily so that customers can report their grievances and concerns to us which we can improve upon.
- Symphony will provide the benefit of the customer getting in direct touch with the operatives so that their questions can be answered. We will have a close look on customer feedback and responses as our product is highly customer oriented. We will rapidly train individuals all across the globe to resolve issues of the users.
- We will constantly strive to bring in the latest features and integrated services to our Symphony app.

f) Technology Personnel Needs

- We will require efficient coders to successfully implement our plans. Individuals proficient in coding complex image and object recognition codes are required. This includes individual's expert in the languages mentioned above such as Python and MATLAB. We also need individuals who are expert in app development. For present and future requirements, personnel with experience in machine learning are required.
- For proper maintaining and operation of the servers, we need technicians. We also

require a workforce dedicated to call centers and other customer interaction systems like chats and email responses.

10) MANAGEMENT AND ORGANIZATION

a) Key employees of the company

CEO: Sourav Gupta

Percentage of ownership: 20%

Type of partnership: General partnership

Duties and responsibilities: Leadership, communication, evaluation of work, setting strategic goal

Salary: 30,000 + (incentives based on profit)

Marketing manager: Asmit Bhattarai

Percentage of ownership: 15%

Type of partnership: General partnership

Duties and responsibilities: dealing with customers, Identifying new customers, Developing and managing advertising

Campaigns, Handling social media, public relation efforts, and content marketing Salary: 25,000+ (incentives based on profit)

Finance manager: Saurav Timilsina

Percentage of ownership: 15%

Type of partnership: General partnership

Duties and responsibilities: Overseeing the flow of cash and financial instruments, Planning and directing the activities of workers in branches or departments, preparing reports as required by law regulations or company policies

Salary: 25,000+ (incentives based on profit)

Research and development manager: kaushik

Percentage of ownership: 15%

Type of partnership: general partnership

Duties and responsibilities: Selecting the most appropriate research methodology and techniques, Designing qualitative and quantitative research plans for products in all stages of the Product Life Cycle, Interpreting data, writing reports, and making actionable recommendations Salary : 25,000+(incentives based on profit)

Human resource manager: MOHAMMED AJLAN

Percentage of ownership: 15%

Type of partnership: general partnership

Duties and responsibilities: Plan and coordinate an organization's workforce to best use employees'

talents, Oversee an organization's recruitment, interview, selection, and hiring processes ,
Handle staffing issues, such as mediating disputes and directing disciplinary procedures
Salary : 25,000+(incentives based on profit)

b) Incentive and compensation

The incentive and compensation are provided to attract quality and required number of employees in the company. These incentives are given on the basis of the performance and productivity of the employee. But the percentage of incentive and compensation differs. What amount of profit and the condition of the company also determines the amount of incentive and compensation. The incentives and we are going to provide is given in detailed below:

CEO: 10 % of salary (incentive)

Festival bonuses (100% of the salary) once in a year MANAGERS: 8 % of salary (incentive)

Festival bonuses (100% of the salary) once in a year ADVISORS AND SPECIALISTS: 8 % of salary (incentive)

Festival bonuses (100% of the salary) once in a year STAFF: 5 % of salary

(incentive) festival bonuses (100% of the salary) once in a year

c) Board of directors

SOURAV GUPTA (CEO)

NARAGANIAMALA SRINIVASBABU

(ADVISOR) ASWIN S NAIR(ADVISOR)

ASMIT (MM)

SAURAV (FM)

KAUSHIK(RDM)

MOHAMMED AJLAN (HRM)

Advisory committee

i) NARAGANI AMALA SRINIVAS BABU

Educational background: Bachelors of engineering

Share percentage: 10%

Roles: program creation and planning, Development of Program Policy Salary: 25,000

Incentives and compensation: 8% from profit

ii) ASWIN S NAIR

Educational background: Bachelors of engineering

Share percentage: 10%

Roles: Funding Leadership, Planning and Implementing Public Relations

Salary: 25,000

Incentives and compensation: 8% from profit

d) SPECIALISTS

Name: Ronish Jung Karki (programme developer)

Educational background: B.TECH (computer science)

Duties and responsibilities: give review on the app, make plans and policies,

Salary: 18,000

Experience: worked as Programme developer in Infosys for 3 years

e) Business specialist

(MANAGEMENT TO BE ADDED)

Nipun chand

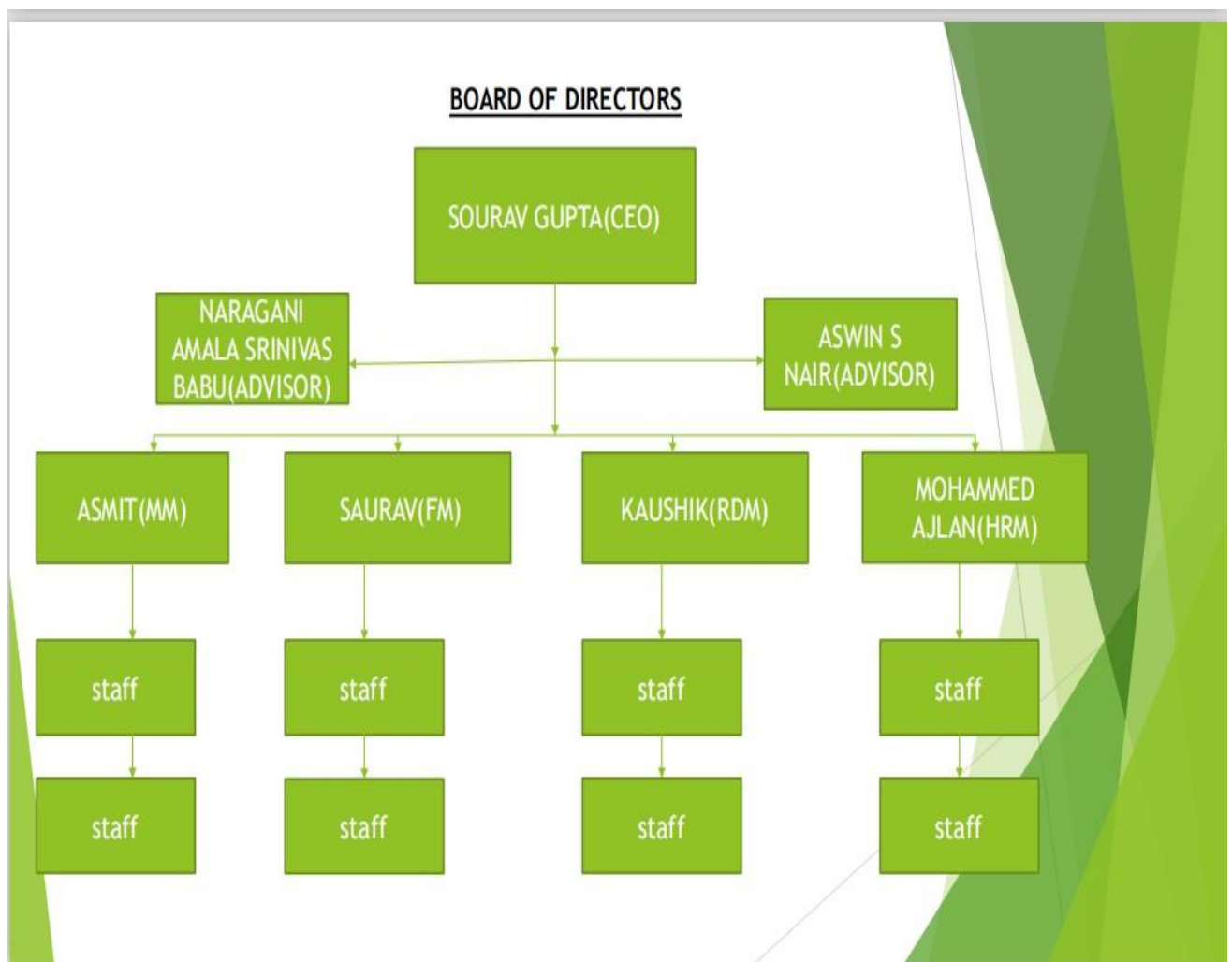
Educational background: masters in business and finance

Duties and responsibilities: review on company's internal work, check progress and

Market condition for the company , procedures and policies and provides recommendations for improvement

Experience: worked as business analysts in infosys for 4 years

Organizational chart:



f) Management style:

The kind of management style that we are going to follow is participative management style. In this type of management style all the member of participate in decision making. Management trusts the employees, but trusts them completely and not only seeks out their opinions and ideas, but they act on them. They work together to make decisions as a group and the staff is highly involved. As a result, employees feel valued and show increased motivation and productivity.

11) SOCIAL RESPONSIBILITY & SUSTAINABILITY

a.SOCIAL RESPONSIBILITY GOALS

- Symphony takes our leadership role very seriously by taking action to give back to the global community. We hold ourselves accountable for the company's impact on the environmental and social well-being of all those we seek to help.
- Our planned strategies and actions focus on providing the skills, knowledge, and training that is required to alleviate a significant global challenge. That challenge, in short, is the tens of millions of individuals on the autism spectrum who lack sufficient ways and means to access a critical, life-changing autism intervention called Picture Exchange Communication System (PECS).
- PECS is the only evidence-based intervention proven to allow children on the autism spectrum to mainstream. Although grounded in behavioral science, simple PECS's methods can be taught to family members, teachers, and others so that every child can have access to this life-changing intervention.

b.COMPANY POLICY

- Working in collaboration with other national organizations to pass the Achieving a Better Life Experience (ABLE) Act, which allows families of children living with disabilities to save for college and other expenses in tax deferred accounts without losing access to critical federal safety nets
- Working with affiliates at the local and state level to understand therapies covered by state insurance laws to provide effective treatment for individuals with an autism diagnosis.
- Advocating to ensure the passage of the Autism Collaboration, Accountability, Research, Education, and Support (CARES) Act, which provides for interagency coordination of autism services with the federal government and provides for research funds for autism continuation.

c. SOCIAL RESPONSIBILITY CERTIFICATION

- Supporting affiliates in their efforts at the local and state level to ensure there is early screening for an autism diagnosis, as early as age 18 months.
- Working for Keeping All Students Safe Act, legislation regulating restraint and seclusion.
- Working to increase funding for Individuals with Disabilities Education Act (IDEA), enabling students with disabilities to receive a fair and appropriate education.
- By advocating at the federal level, the Autism Society is assuring each individual diagnosed with a developmental disability, including autism, will always be provided

Full opportunity to live his/her life as independent as possible and always respected, valued and assured of the highest level of dignity.

d. COMMUNITY INVOLVEMENT

Our goals:

- We understand the need to tailor our solutions to best meet the unique needs and opportunities in the countries in which we operate. Translating our solutions into different languages and adjusting our pricing model for helping develop it are only a few ways in which we demonstrate our understanding and show our commitment to the global community.

The main two communities involved are:

1.NGO

Most NGO's, starting with VIT's – and many more are one of the core communities involved with Symphony. These organization uses symphony as a platform to help provide a better outreach in autism related issues in orphanages and other schools for the differently abled. We are starting with a small reach of NGO's within VIT and planning to further improve are connection after gaining some attention.

2.Special Schools and Centres

In Vellore district orphanages such as FIAT friendly home, Sri Ayush Maan Bhava, Nambikai Illam, etc. are going to be directly involved with are startup. We will be providing their teachers with sessions to help kids use the symphony app. This will be of great use to them as it will help them communicate better with the kids.

e. SUSTAINABILITY

- Symphony is all about grassroots. It is about change from the ground up, and it is all the people and things in our control, and outside our control, that impact us, our families, our community and the world around us. From every interaction we have, there is an opportunity for people to connect, learn, share and grow.

- We also know that the people most affected by a problem, are the ones most likely engage, unite and find solutions. Symphony helps form a community of families, friends, teachers, therapists. People who work together to create what is needed. Workshops, classes and other events designed to cater to the needs within a community.

- But what makes these efforts by symphony so special is that they are continuous, they are organic in approach that are ever-changing, growing, and evolving to what the community needs in order to build communities that are sustainable.

12.DEVELOPMENT, MILESTONES AND EXIT PLAN

a.LONG TERM COMPANY GOALS:

- The company is aimed to achieve the status of best technology provider in user friendly apps focused on people with Disabilities.
- The company aim to achieve foreign investment and be able to list in stocks.
- The startup also aim to collaborate with government agencies so that the app could achieve the status of 'people's app'

TECHNICAL GOALS

BEST PROVISIONS IN TECHNICAL UPDATES

*Consistent and improved updation of new technology *Improved user interface and bug fixes *Advanced security

TRACKING THE RESULT

•It is important to know when it is useful to analyse and assess the effectiveness of your own work.

•Using statistical parameters for result analysis

b. GROWTH STRATEGY

.TEST MONETISATION STRATEGIES

Here we can include:

•Free In-app Purchases

•Advertising: Users can access the application for free, but advertisers are charged to display ads to these users.

•App Store optimization

.GENERATING REFERRALS

•One of the best ways to grow at any stage is to tap into the networks of your existing users through referrals. Consumers trust recommendations from family and friends above all other forms of marketing

c. MILESTONES

The startup can be a Profitable business model through :

- *Reaching a significant number of user (Marketing milestone)
- *First Repeat Client(Customer milestone)
- *Establishing legal entity of the app
- *Enabling the app for the digital marketers
- *Acredation of the app by various business companies

d. RISK EVALUATION

- Risks affect the development of the app, inhibit the growth rate
- Risks evaluated on the startups are:
- Market risk:
 - Misjudging of customer preferences
 - Inclusion of unwanted features
- Technological risks:
 - Exposure to security threats,
 - Violation of certifications or legal formalities
- Team risk:
 - Mislead of workforce
 - Improper recruit of employees.
 - Improper scheduling of tasks

e. EXIT PLAN

- In the years before exiting the company, increasing the employee salary and paying bonuses and incentives to them is the easiest business exit plan to execute.
- Upon retiring, sell all our shares to some sources. We will get money from the sale of shares and be able to leave the company.
- Liquidate all our assets at market value. Use the revenue to pay off obligations and keep the rest.
- A Buyout: A buy out is exactly what it sounds like. A larger company, usually one that is well established and has interest in the product the startup has created, will offer a substantial amount of money to purchase the startup. In this case, investors receive a chunk of their initial purchase equal to their equity back. The startup might then be collapsed into the larger company, or it might run as a subsidiary of the original.

13.THE FINANCIALS

a.Income statements

- Initially our product will be free of cost. There will also be paid version without ads which can be bought by the customers. Our main source of revenue will be from the advertisers. Components of an Income Statement
- Revenue/Sales: Sales Revenue is the company's revenue from sales or services, displayed at the very top of the statement. This value will be gross of the costs associated with creating the goods sold or in providing services. Some companies have multiple revenue streams that add to a total revenue line.
- Cost of Goods Sold (COGS): Cost of Goods Sold (COGS) is a line-item that aggregates the direct costs associated with selling products to generate revenue. This line item can also be called Cost of Sales if the company is a service business. Direct costs can include labor, parts, materials, and an allocation of other expenses such as depreciation
- . Marketing, Advertising, and Promotion Expenses: Most businesses have some expenses related to selling goods and/or services. Marketing, advertising, and

promotion expenses are often grouped together as they are similar expenses, all related to selling.

- **General and Administrative (G&A) Expenses:** SG&A Expenses include the selling, general, and administrative section that contains all other indirect costs associated with running the business. This includes salaries and wages, rent and office expenses, insurance, travel expenses, and sometimes depreciation and amortization, along with other operational expenses. Entities may, however, elect to separate out depreciation and amortization in its own section.
- **Operating Income (or EBIT):** Operating Income represents what's earned from regular business operations. In other words, it's the profit before any non-operating income, nonoperating expenses, interest or taxes are subtracted from revenues. EBIT is a term commonly used in finance and stands for Earnings Before Interest and Tax.
- **Interest:** Interest Expense. It is common for companies to split out interest expense and interest income as a separate line item in the income statement. This is done to be able to reconcile the difference between EBIT and EBT. Interest expense is determined by the debt schedule.
- **Other Expenses:** Businesses often have other expenses that are unique to their industry. Other expenses may include things such as fulfillment, technology, research and development (R&D), stock based compensation (SBC), impairment charges, gains/losses on the sale of investments, foreign exchange impacts, and many more expenses that are industry or company-specific.
- **Income Taxes:** Income Taxes refer to the relevant taxes charged on pre-tax income. The total tax expense can consist of both current taxes and future taxes. Net Income ° Net Income is calculated by deducting income taxes from pre-tax income. This is the amount that flows into retained earnings on the balance sheet, after deductions for any dividends.

INCOME Product sales 1,00,000 Other income 40,000 Total Income 1,40,000
EXPENSES Advertising 5000 Bank charges 500 Office expenses 6000 Professional Fees 55000 Miscellaneous 2500 Taxes 10000 Total expenses 79000 Net income 61000

INCOME	
Product sales	1,00,000
Other income	40,000
Total Income	1,40,000

EXPENSES	
Advertising	5000
Bank charges	500
Office expenses	6000
Professional Fees	55000
Miscellaneous	2500
Taxes	10000
Total expenses	79000
Net income	61000

b. Cash flow projections

- A cash flow statement is a financial statement that summarizes the amount of cash and cash equivalents entering and leaving a company.
- The cash flow statement measures how well a company manages its cash position, meaning how well the company generates cash to pay its debt obligations and fund its operating expenses.
- The cash flow statement complements the balance sheet and income statement and is a mandatory part of a company's financial reports since 1987.
- Variable expenses: • Postage, mailing, packaging, and shipping costs

- Commissions on sales
- Production costs
- Raw materials
- The wholesale price of goods to be re-sold Fixed Expenses
- Rent
- Utilities
- Phones (business phones and cell phones)
- Credit card processing - monthly fees (transaction fees are variable Miscellaneous Expenses

Monthly Sales 70,000 Total fixed cost 48,000 Total variable cost 6,000 Total cash balance 16,000.

c. Balance sheet

BALANCE SHEET

Assets	IN INR	Liabilities and Stockholders equity	IN INR
Cash	1.4Lakhs	Liabilities	
Marketable Securities	20,000	Current liabilities	80,000
Prepaid Expenses	20,000	Loans & Long-Term Liabilities	0
Inventory	10,000	Owner's equity	40,000
Other Assets	0	Total Liabilities & Owner's Equity	1.2lakhs

SOURCES AND USE OF FUNDS

- We have estimated total start-up costs to be around starting around 4 lakhs. The numbers in the start-up and the start-up funding tables are meant to reflect these estimates. The company capital will be 2 lakhs. The costs will be increased as we expand around the country to be accessible to all. The six members who will be the co-owners will provide the bulk of the start-up financing in the amount of 30,000 each. Each person will have a 7% ownership. Approximately 2 lakhs additional funding is needed. The purpose of this business is to secure for that amount. An investor and a co-owner is welcome to participate in the company's capital for the amount of 1 lakhs, and could be offered a portion of the ownership of the company capital. The funds provided by the investor will be used to buy equipment, and to cover part of the startup expenses.
- For the remaining 2 lakhs and beyond needed after the initial set-up, to cover up the start-up costs, the company plans to receive a two-year term commercial loan facility which will meet the cash flow requirements. The borrowed funds will be used extensively to buy equipment based on the list. The loan could be repaid in equal monthly installments over a two-year period. The initial 1 lakhs will be used to set up the main app for the start-up hiring the programmers and to maintain regularly applying all the required security measures. A few of the amount will be used to set up the database by collecting all the data from the hospitals and doctors. Around 10,000 will be used for advertising. Advertising will be done online, through posters, through schools, NGO's, seminars, webinars and other means. The rest will be used to set up the stores and main headquarters so that we can reach out to the people who do not have access to the internet. Our cash-flow analysis demonstrates the company's ability to repay the loan and meet the interest payment obligations, while maintaining adequate liquidity and generating positive cash flow and sufficient cash reserves for unforeseen future events. For conservative purposes, the annual interest rate has been estimated at 12 percent. The actual interest rate and the borrowing terms will be negotiated with the participating bank. Strong collateral could be provided by an SBA guarantee, and by the owners' personal assets.

e. Plan assumptions

We plan to start our operations from Vellore, working with local NGOs and some government hospitals. From here, we will be slowly moving to other metropolitan cities and then finally going to the districts with the most affected regions and the most populated area. Here, while increasing the area of work, we might need to take loans to set up the centres which will be paid back as soon as possible. After having sufficient capital, we shall be moving to the funding process of crowdfunding where there won't be anymore requirement of taking extra loans from the bank. Crowdfunding is the practice of funding a project or venture by raising many small amounts of money from a large number of people, typically via the Internet. Crowdfunding is a form of crowdsourcing and of alternative finance.

- This Country is a growing middle-to-high-class area, counting more than one million residents. There are about five hundred businesses close to our location. Most of these residents are families of three or more. The average income for the area is 4 lakhs. The boom in the area is primarily in response to new business and employment opportunities in the city's Local Bay Industrial Park. With continued growth in the area, opportunities to serve the Local residents will increase. The company will sell to individuals, but it will also accept some occasional jobs to individuals and companies in the area. We estimate that over 90 percent of our sales will go to individuals (retail customers) and the remaining balance to existing and future businesses (corporate customers). However, it is important to note that, typically, corporate companies have larger needs for setting up the facility for their employees. □ As explained above, the main market segments are: a) individuals (retail customers) accounting for more than 90 percent of our sales b) Local businesses (corporate customers) which, in terms of purchase orders, typically make larger orders for their employees and business needs.

f. Breakeven analysis in INR (in lakhs) Jan Feb Mar Apr

BREAKEVEN ANALYSIS

IN INR (IN LAKHS)	JAN	FEB	MAR	APR
Cash at start of month	50	40	30	10
Cash inflows	40	50	40	30
Cash outflows	50	60	60	20
Net cash flow	-10	-10	-20	10
Cash at end of month	40	30	10	20

Total Revenue	90	100
Expenses		
Finance costs	30	33
Research	5	5.5
Development	5	5.5
Amortization	40	44
Other expenses	10	11

Assests	In INR(in lakhs)	Liabilities and stockholders equity	In INR(in lakhs)
Cash	40	Liabilities	
Marketable Securities	5	Accounts payable	30
Accounts receivable	5	Current debt	50
Inventory	10	Taxes payable	10
Prepaid expenses	10	Total Liabilities	90
Other assets	20	Owners equity	
Total current Assets	90	Common Stock and paid in cap	40
		Total shareholder's equity	20
		Total Equity	60

15) MARKET RESEARCH

We made a Google form and sent in to various institutions that have been dealing with people with AAC. The link for the Google form we created is:

<https://docs.google.com/forms/d/e/1FAIpQLSccMAj5plfeV8saUOGOcKp4ol99zBQhomfJdZpludXqkTSOuW/viewform>

We had asked a total of 7 questions to the companies and the following results were obtained:

- What are the major issues that have been to your institution relating AAC Autism
- Are people open about sharing about AAC?
Yes: 59%
No: 41%
- How many people approximately visit with problems relating to AAC in a month?
50-60
- What is the solution that has been best implemented by the public?
Most of them are not open to this but the ones are dealing with it by the usage of various means like applications and caretakers
- Around what percentage of people mention about the applications that support people with AAC?
25-50
- Do you suggest the usage of AAC related apps?
Yes

- g) What is the major suggestion you would like to give to company like ours who make AAC based apps?
Make it user friendly and available to people who are not open about this problem.

TOPICS AND THEIR CONTRIBUTORS

TOPICS	PRESENTORS
EXECUTIVE SUMMARY AND COMPANY DESCRIPTION	SOURAV GUPTA (17BCL0252)
THE COMPETITION & MARKETING PLANS AND STRATEGY	N.A.SRINIVAS BABU (17BCL0294)
INDUSTRY ANALYSIS AND TRENDS & THE FINANCIALS	KAUSHIK DEKA (17BCL0238)
TARGET MARKET & STRATEGIC POSITION AND RISKASSESSMENT	ASMIT BHATTARAI (17BCL0306)
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SOCIAL RESPONSIBILITY AND SUSTAINABILITY &TECHNOLOGY PLAN	MOHAMMED AJLAN (17BCL0160)

