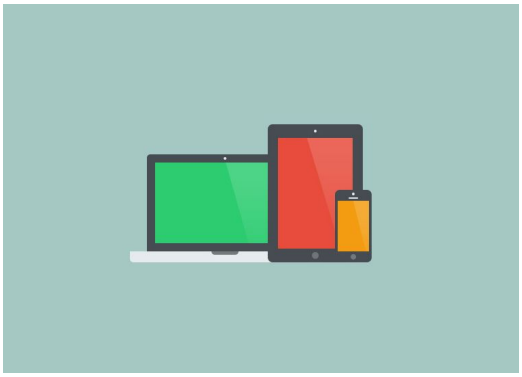
I. Executive Summary



In today's world, technology is everywhere. From cell phones which can be found in almost everyone's hands, to laptops which provide for office work and entertainment, technology is a large part of most people's lives. One factor is common through all of these devices, and this is also what limits the usage of devices. This factor is batteries.

Most of the essential devices people need in their lives, such as their phones, barely last over a day before needing to recharge. This can be a problem to the user. To compensate, users must either carry chargers, large battery cases, or limit using their device. None of these are favorable, and many would appreciate more practical ways to solve the problems that batteries present.

To respond to those who desire more from their devices, Flex Battery offers a smaller, more powerful, and more durable battery than current batteries. Our battery has the power to last weeks before needing charge, is much safer than batteries used in current devices, can be smaller and cheaper. Using an aluminum battery instead of the lithium-ion batteries that most products use, the problem which users face are fixed by our company.

The first target of our business will be mobile device manufacturers, who struggle with batteries the most. They must balance cost, size, and battery life. Our company has the solution to their problems. Other primary markets include car manufacturers, because electronic vehicles also deal with problems of size, battery life, and safety. Due to the nature of batteries made by our company, these problems are fixed. Companies can work towards innovating new products instead of trying to solve the same problem they have been for a long time.

The final advantage of our product is its origins. Lithium-ion batteries are constructed from cobalt. When its sources were investigated, it was found that an estimated of 40,000 children work in mines to extract cobalt at one site. They are paid minimum amounts, and are forced to work in extreme conditions for long shifts to produce cobalt used in major manufacturer's devices. Flex Battery uses components where the sources are known, and does not use cobalt which is from these illegal mines.

II. Problem

Batteries today have a plethora of disadvantages, but three major problems: size, safety, and battery life.

The first problem of batteries is their size. Batteries are generally clunky and heavy, which causes the weight of phones and other devices to be quite large. This causes other technology in the gadget to either be reduced in its efficiency, or removed. In cars, this results in less efficient travel. For phones, consumer's reviews say that phones are too heavy to be carried everywhere.

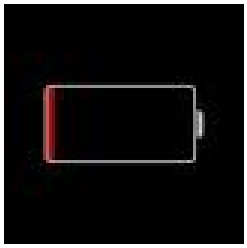
Secondly, lithium-ion batteries are dangerous. There have been incidents of batteries causing fires previously so there must be multiple ways to check for battery damage, temperature, and conditions. These sensors use more of the limited space inside devices.

The final problem, and most important, is battery life. Batteries are often the limiting factor of mobile devices, which prevents software advances. This is because, bluntly put, lithium-ion batteries cannot deliver the current needed, or if they do, their life becomes less.

III. Customer Segments

Our products could be wasted without the right consumer to use them, and so each potential population has been researched to find the right demographic to sell.

The primary market for our products are companies that need small powerful, and durable power sources such as phone manufacturers. Considering they have needs for long life batteries and not found solutions, this is the first market that would be targeted.



Also powerful batteries are needed by car manufacturers, who have been dealing with many problems of batteries including life and weight. These are also a part of our primary market, because they have been researching batteries that will increase the growth of electric powered vehicles.

Secondary markets include all other population sectors that require batteries. This includes two main categories, which are companies that use batteries for purposes other than cars or mobile devices, and general customers that use the batteries for their own personal devices. These markets will not represent a large part of sales, but a recognizable amount that should be still meaningful.

IV. Unique Value Propositions

Current batteries have none of the main benefits of aluminum air batteries, and this is the major advantage of our company.

The first point is the size of our battery. Most batteries are large, stiff, and heavy, but aluminum air batteries produced by our company are much smaller, flexible to bend around shapes, and lighter. This is due to several factors including the materials and structure.

The second point is safety of our battery. As other types have been known to cause damage when treated without care, the aluminum battery can be taken apart and not have hazardous consequences including fire. This is because of the material used in the battery.

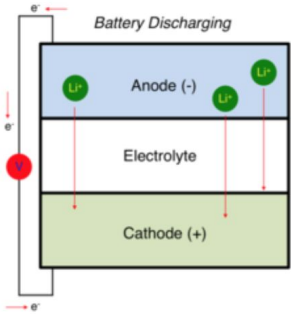
The third point is the life of our battery. While most batteries need charge from electric ports or chargers after a few hours, the battery produced with the company's technology follows its brand promise of, *"Use for days. Charge for minutes. Not the other way around."* Our battery lasts for days without needing to be plugged in, and is longer lasting than most batteries that are powered by lithium. Also, the recharge time is a few minutes.

With all of the possible problems fixed with our products, one compelling message summarizes them: our battery is the one that is most useful to the user.

V. Solutions

All of the issues of lithium-ion batteries have been underlined many times, but without tangible solutions, there would be next to absolutely no progress.

The science of the battery will be explained first to simplify the reasoning for the solutions. Batteries have the anode, cathode, and electrolyte. The device sends current from the anode, through the electrolyte or conductor, and follows to the cathode.



In lithium-ion batteries, the anode is made from lithium, the conductor is made from a liquid, and the cathode is made from a compound of metals. In aluminum air batteries, the

anode is aluminum, the conductor is a salt, and the cathode is graphite. This battery type has been tested before, and was a real solution in experiments at the Stanford University. The reason that aluminum air batteries have not been used in devices before the present is because the technology is so new, that it has not been produced yet in factories. With science of the battery covered, the selling points will be discussed.

Battery size, the first concern, is fixed with using the different salt electrolyte to transfer current. This needs less room than the liquid conductor of lithium-ion batteries. Using air, the battery is cooled and the space of ventilation is not needed. This makes the battery smaller without removing power.

The next problem, safety, is fixed with the electrolyte. The liquid electrolyte in lithium batteries is harmful and causes problems with safety. The electrolyte that is used also leads to heating and combustion problems. The salt electrolyte in aluminum air batteries is durable, and less reactive than the chemical used in the other one. This allows the battery to be bent, and heated without issues.

The most important problem, the battery life, is the main key to the company. Research done proves that battery life of aluminum batteries is thirty times that of lithium batteries, and needs a charge of less than a few minutes. This research is still in theoretical testing, but shows that the life of the battery is much better.

Users would be able to use their phone for days without needing to consider charging their gadget, and software advances would be added to the mobile world that does not need to think of depleting battery life, and increases innovation.

	Battery Life	Weight	Safety	Cost	Recharge
Lithium Ion	Typically one day	80g	Explodes if drilled	$70	7 hours
Aluminum	Close to half a month	20g	Can be drilled or bent	$20	1 minute

VI. Channels

Three different marketing channels will be used to spread the news of our battery and all of its benefits. This includes press releases, online and mobile ads, and billboards.

First, a press release will inform the markets of our product. Many companies have used similar strategies before, and it allowed for technology related websites to have some information about this innovation. This notifies most early adopters, and sales could begin.

Web advertising is broad concept, but specific plans will be set to increase the presence of the product. First, mobile advertising within applications will be used, such as banner ads which has the company's slogan, of *"Use for days. Charge for hours. Not the other way around."* and the logo with the company name. The ad, when clicked, will go to the company website. Similar designs will be used on Google Ads. Finally, the company will have ads on technology and news websites, such as Flipboard, CNET, and Business Insider. These media outlets are used by many markets, and will inform them of our company.

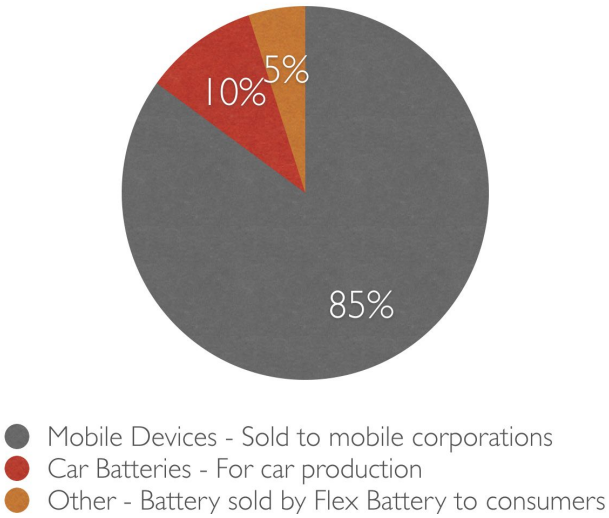
Finally, the company will use billboards to reach out to almost everyone in an area. A sample is shown below. This will inform people who both may not initially interested, and those who are but do not use other channels used to advertise by Flex Battery.

VII. Revenue Streams

Flex Battery will have the most revenue from sales of three main batteries, and investments. The three batteries produced are for mobile phones, cars, and smaller end-user devices.

For the launch year of our company, revenue is not expected to be large. It is estimated at about $1,000,000, which will be from early adopters and investment. In 2017 revenue is expected at $30,000,000, once the battery has taken the market of mobile batteries in lower end phones and laptops. In 2018, the revenue is expected to increase with the larger companies using Flex Battery products to run their devices, and with cars also using aluminum batteries. The revenue will be $135,000,000, with possible change. In 2019, the revenue will even as our batteries are used in almost all devices and imitating companies begin to produce aluminum products to compete. The revenue is expected at

$172,000,000. Profit will be close to 30% in the first couple quarters, but will rise to 60% in a few years. This number will change with production and cost changes.



The lifespan of the batteries is also significant. For mobile batteries, the lifespan is three years. For vehicles, the lifespan of the battery is five years. As user batteries, the products will last two years. This is a main flaw of aluminum air batteries, but Flex Battery has ways to prolong the use of devices. The battery of each device can be switched after it stops, so people can continue to use their gadgets and cars after the first battery fails. This does not affect most phone users, because they replace their phones every two years most of the time. For car batteries, the battery will be replaced every few years, and will be as a normal servicing appointment to them and not a reason to stop driving their car that they bought.

VIII. Cost Structure

Flex Battery offers three main products: A battery for mobile devices, cars, and a simple battery for users.

The mobile battery will be for phones, laptops, and other devices which require a small battery. Price to produce this battery will range from $20-$40. The battery will be sold for $30-$50, depending on the size and quantity bought.

The second battery will be for cars. Sold to companies that make cars or general transportation machines, the battery will cost $100-$200 to produce. The battery will then be sold to car manufacturers from $150-$300, depending on order size.

The final product sold will be a general battery, used for any purpose the buyer desires. It will cost $5-$70 to produce. Sold to consumers from $10-$105, the battery will be the most versatile made.

The production of the batteries is also part of the costs, and is calculated for the years until 2019. The factory will be rented for $70,000 a year, until 2018 where it will be bought. Cost of the factory will be $1,000,000, and will cost $2,000 a year after that. Other prices are below.

	2016	2017	2018	2019
Factory	$70,000	$70,000	$1,000,000	$2,000
Labor	$200,000	$10,000,000	$30,000,000	$55,000,000
Marketing	$500,000	$1,000,000	$3,000,000	$4,000,000
Total	$770,000	$11,070,000	$34,000,000	$59,000,000

IX. Key Metrics

The following 3 metric will be most important to manage health of the company:

1. Expenses: To track all the expenses the company is making on an ongoing basis such as employee salaries, factory rental, equipment rental, material procured for manufacturing batteries and other smaller expenses.
2. Revenue: How much money we are earning by selling the batteries
3. Profits: Calculating how much profit the business is generating by using revenue and expenses to arrive at company's profits

X. Competitive Advantage

Flex Battery is the only company which makes aluminum air batteries which are more powerful than lithium ion batteries used currently.

To prevent other companies from copying our business, two steps will be completed. The first is by filing the appropriate patents. This will legally stop others from taking our technology. Next, we make sure that we are taking good care of key engineers so they don't leave to join competition. This will include higher salaries for them, or increased benefits.

XI. Conclusion

There is need, and no supplier yet to fix the problems of batteries now. But with aluminum air batteries made, these problems can be fixed.

Why does the entire group of people who have devices need our product? For three main reasons, including size, battery safety, and time to recharge. Flex Battery is a company of ethics, consumer choice, and performance. We fix all the big problems of the batteries used today, and the power to change the way people use their gadgets is within reach.

Before the company requests funding, we would like to remind the investor of one aspect. Flex Battery is more than just one more company that has an idea; it is a way to change the world. The power which our company has to influence the way that devices run is large, and we ask that investors help us to change the rest of the population. With information about that, we ask $500,000 in return for the following benefits. First, 10% of the company which is a long term holding. Then, a position on the Board of Directors. Finally, as an investor, they receives free products from Flex Battery when made.

Before finishing, I ask readers to visit the company website, www.flexbattery.tech, which is a real website, to learn more information about the product.

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