**Financial Assumptions**

**Group #6 - Restful Solutions**

**Revenue**

The final rule on electronic logging devices (published by the Federal Motor Carriage Safety Administration, which is under the Department of Transportation) estimates that around 3 million truck drivers will need to adopt ELD technology by the end of 2017. The expected cost of all of these physical devices is estimated to be $1.348 billion, and the total costs of the implementation of this technology is expected to be $2.298 billion. Dividing the estimated costs by the number of trucks gives an approximate expected cost of $400 per ELD device (not including monthly service fees).  Based on this data, along with the expected costs of similar devices found at overdrive.com, we plan for our product to be competitively costed at around $500 with a monthly service charge of $25. Benefits are expected to be over $1 billion, so there is a net benefit for trucking companies.

Of the 3 million trucks that will soon be required to adopt ELD technology, we forecast that our system will be implemented in 0.12% of them (3,600 trucks) by the end of our first year, 1.5% (45,000 trucks) by the end of the second year, and 2% (60,000 trucks) the following year.  We plan to start with a smaller production level, effectively performing as a type of test run, in the first year.  Then we will heavily increase production and sales the second year when the ELD technology will be required to be implemented.  After the second year, we plan to consistently increase from this elevated production and sales level. There are similar devices on the market, but we are one of the first movers related to the final rule mandate, so we expect to be able to reach a significant market share after a brief period of time by obtaining feedback from trucking companies and truckers on what features would be most beneficial to the trucking company/trucker.  We are also exploring options that would further increase the safety of the driving experience by including additional features such as sleep tracking; these features could be leveraged by adopting trucking companies with insurance companies to negotiate reduced insurance premiums, increasing the appeal of our product. We took sales return allowance per year to be around 15% of the gross revenues.

Outside sources:

* <https://www.gpo.gov/fdsys/pkg/FR-2015-12-16/pdf/2015-31336.pdf>
* <http://www.overdriveonline.com/2015eldchart>
* [www.accountingtools.com](http://www.accountingtools.com)
* [www.wikinvest.com/stock/Estimating\_Sales\_Returns\_Other\_Allowances](http://www.wikinvest.com/stock/Estimating_Sales_Returns_Other_Allowances)

**Cost of Goods Sold (Materials)**

We modeled our cost of goods sold figures based on the functions our device would have to perform; these functions are based on the final rule by the FMCSA. The critical functions of the device are knowing when and where the engine is turned on and how long it is actually running. Our product will also require very basic GPS software that will track the movement of a truck once every hour in a 10 mile radius. This data will need to be collected and formatted so that the truck log can be exported into a simple email or data file that can be accessed through a USB port. In order to achieve these functions we will implement the use of particle technology, specifically the 3G sensor kit ($150). In addition to this kit we will also need plastic housing and wiring to connect the particle with the input (engine data) and the outputs (usb port). We estimate these costs to be $20 per item. Our cost of goods sold expense strictly relates to materials required for production of our minimal viable product.

As stated in the Revenue section of our financial assumptions, we forecast that our system will be implemented in 0.12% of these trucks (3,600 trucks) by the end of our first year, 1.5% (45,000 trucks) by the end of the second year, and 2% (60,000 trucks) the following year. Our total cost of goods sold expense is calculated from this anticipated demand and our expected cost of $20 per item.

Outside source:

* Particle.io

**Other Operating Expenses**

Other operating expenses are the cost of resources used by our organization to maintain its existence and continue providing our service to our customers.  Many companies on overdriveonline charge between $15-$45 per month for their service. These numbers are based on the costs of running the actual service. Because these companies are able to adequately provide their services while charging a minimum of $15 a month to their customers, we expect to easily meet that mark. As such, we are assuming our other operating expense to be $15 per month, per truck. This price may change in the future, as we alter the features implemented in our device based on ongoing customer feedback. (<http://www.overdriveonline.com/2015eldchart>)

**Rent, Utilities, and R&D Expenses**

Assuming our company will be based out of Gainesville, FL, the cost of the renting of a warehouse for manufacturing or office space will be around $4-$7 per square foot annually.  There will also be an additional annual cost of $2-$3 per square foot in operational expenses (utilities, insurance, taxes, etc).  Given that the average warehouse is 16,400 square feet, we expect to pay $90,200 for rent and $41,000 for utilities annually. On average, most companies spend only a small percentage of their revenues on R&D but software companies tend to spend a bit more. Usually this falls around under 5% but we will assume 7% of our revenue for our research and development for software. Since we are starting small, we will start our research and development at 2% of our revenues and slowly work our way up to 7%  over time or adjust as needed year by year.

Outside sources:

* Trulia.com
* <http://www.investopedia.com/terms/r/randd.asp>

**Professional Services**

Many startup companies often avoid or minimize their use of professional services, such as accountants or lawyers, to avoid the associated high costs.  However, not only can use of these services help prevent potential disaster for companies, hiring professionals often increases revenue and profit.  As mentioned by Tomasz Tunguz, a venture capitalist who writes about startups, professional services can greatly increase the total revenue of a company, sometimes as high as 40% (but often at least 20%). Having a legal expert available to our company will reduce issues commonly associated with having more than one company founder.  Our product and industry will also require that we maintain adherence to a strict government code (the FMCSA ELD final rule).  As such, we will want to be aware of, and protected from, the many legal issues that could arise in keeping our product up to code.

Lawyer fees for startups can range commonly range from $5,000 to $20,000.  We expect our fees to be at the lower end of the range due to having access to our network of students at the University of Florida Levin College of Law, as well as future lawyers involved in entrepreneurship. While our network is not currently extended to certified lawyers, advice from these law students will guide us and help reduce the amount of time spent with certified lawyers, thus reducing total hourly fees. We expect our legal fees to be about $10,000 each of the first two years due to the complexity that arises from adhering to the FMSCA code. We expect the fee to lessen in our third year, to about $7000, because our product will already have been launched in adherence with the code.

In addition to fees associated with legal advice, professional accountant fees will also need to be taken into consideration. Based on the cost helper application at smallbusiness.com, we expect annual accounting fees to be around $1600 each of the first two years, and $2500 the third year due to a larger and more complex business. These costs will be mitigated as much as possible, again through our company’s network, which includes graduate students at the University of Florida Fisher School of Accounting. In addition to using our network connections in the school, we can take advantage of the structure and focus of many highly acclaimed accounting graduate programs, such as those at Wake Forest University and the University of Florida. Many such programs actively seek small local businesses to send their students to for real-world experience, so we anticipate relative ease in receiving quality accounting services at a reasonably low cost.

Outside sources:

* <http://tomtunguz.com/professional_services/>
* <http://startuplawyer.com/startup-issues/how-much-to-pay-your-startup-lawyer>
* <https://www.quora.com/What-are-the-expected-legal-costs-for-a-startup-at-the-angel-and-Series-A-stages>
* <http://smallbusiness.costhelper.com/accountants.html>

**Payroll - Employee and Management**

According to smallbusiness.com,  outside of common startup hubs (such as New York City, Silicon Valley, San Francisco, Los Angeles, and Washington, D.C.), employees at startups expect to be paid a base salary of $2000 per month. A C-level employee can expect to be paid $0-2000 per month.  We expect to have 5 employees in the first year, 10 in the second year, and 16 in the third to accommodate our company’s growth. Of the employees, two are management and two each year are interns who will make $800/month.

(smallbusiness.com)

In the very first year, we expect employees to make only $20,000 per year, while management will make $17,000 per year. These salaries will increase incrementally over the years (i.e. $17,000 in year one, $20,000 in year two, and $25,000 in year three), but intern compensation will remain a constant $800 per month. (quora.com)

**Payroll Tax**

Our company anticipates a total effective tax rate of 31.3%.  Of that 31.1%, 15.4% is due to corporate income taxes and 15.9% is due to payroll taxes, over half of which is paid by the employer on the employee’s behalf. An average employee of a startup company pays $8,462 in payroll taxes, a portion of which our company will need to withhold. We based our payroll tax expense on a conservative rate of 20%.

(taxfoundation.org)

**Workers’ Compensation**

Based on the data found at insureon.com, we project a workers’ compensation expense of $1.50 for every $100 of payroll expense. These projections are also in accordance with the data found at techinsurance.com, stating that small business owners with few employees can typically expect to pay $2000-3000 for workers’ compensation coverage annually.

**Sales and Marketing Expenses**

Our sales and marketing tactics will be targeted at specific trucking companies and will therefore be significantly less expensive than those sales and marketing costs associated with products being sold to the general public. In addition, our product is meeting a need that cannot be ignored by trucking companies. While we do have to compete with other similar companies we do not have to convince trucking companies to use our product or something similar due to the final rule on ELDs by the FMCSA.  We based our figures on a variety of traditional marketing strategies such as video advertisement, ads, and flyers which would be sent to specific companies in order to target a specific market. (<http://localvox.com/resources/marketing-statistics>)

**Website and Application Development**

Breakdown of Average Website Expense Ranges:

* Planning: $0 - $600
* Visual Design: $1200 - $2400
* Programming: $3000 - $4800
* Content Support: $240 - $600
* Client Training/Documentation: $240 - $600
* Testing and launch: $960 - $1200
* TOTAL: $4440 - $9000

In addition, according to executionists.com, it is recommended for companies such as ours to invest $500 per month in ongoing, proactive marketing efforts and search engine optimization.

Our website will be created new, and it will function in mainly a promotional capacity rather than as a multifaceted website. Therefore, we assume our website and application expenses will be on the low side of the average website costs (as shown above) at a total of $10,440 per year. We also assume that this expense will increase gradually over time as our company becomes larger and more complex. (executionists.com)

**Office Supplies**

The average cost for office supplies in the U.S. is $19 per month, according to smallbusiness.com. Our company anticipates having the average amount of office supplies in the first year.  We expect this amount to then increase as more computers will be needed to meet increasing production and employment levels. The average cost of a PC is $700. Our total costs are based on the United States’ average office supplies cost, and our expected need of 10 computers in the first year, 1 additional PC in the second year, and 2 more in the third year, based on our anticipated employment and production levels. (thesba.com)

**Dues, Fees and Licenses**

Disaggregated information regarding our company’s annual dues, fees and licenses expense is detailed below, based on data found on the corresponding websites.

* State business license: $165 (smallbusiness.com)
* Florida Sales Tax Registration (to charge customers): $5 (sba.gov)
* Occupational license: $275 (fbpe.org)
* Unemployment insurance: 6% of wages in the state of Florida (fitsmallbusiness.com)
* Register business name: $275 (smallbusiness.com)
* Local business license: $215 (myflorida.com)
* Business zoning fees: $100
* TOTAL:  $1035 + 6% of wages