

**Q&A with Larry Murray, Chairman and CEO of Global Technology Systems, Inc. designer and developer of Batteries and Chargers for Mobile Devices now helping Enterprise Customers and Government Agencies Streamline Business to Increase Mobile Productivity and Reduce Costs****Larry Murray**  
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“GTS provides an opportunity to make very significant savings that streamline the business to increase mobile productivity at no cost to the customer.”- Larry Murray

**CEOCFO: Mr. Murray, would you tell us the focus at GTS today?**

**Mr. Murray:** Over the years, GTS has been known as a designer and developer of batteries and chargers for mobile devices; all kinds of mobile and portable devices, primarily used in the retail, logistics, manufacturing, warehousing, etcetera. We have built a very nice business around that.

In our last conversation, we discussed our evolution into providing more services to our customers. A company using batteries cannot determine when those batteries are good or bad. We have looked into that and have come up with some solutions for it. We worked with a group called VDC Research Group, Inc., located in Natick, Massachusetts. For 25 years they have been experts in researching the usage of mobility and devices used in mobile businesses. In looking at data with them, we have determined that worldwide there are about a billion mobile workers that are using mobile devices like scanners, two-way radios and mobile printers. There are probably 100 million mobile workers in the US and likely 500 million devices floating around, as well. All use batteries that need to be charged. As we like to say, today's businesses run on mobility and mobility runs on batteries.

**CEOCFO: What have you come up with?**

**Mr. Murray:** Seeing the size of the market, seeing the dilemma these mobile users have in trying to manage the power for them, and studying the statistics that say that over 60% of the users of these devices experience mid-shift failures and each mid-shift failure results in lost worker productivity and internal support time costs, we recognize that the issue is that batteries frequently fail, mid-shift, and the price of that is between 180 and 260 minutes of lost labor, not to mention lost

opportunities. If you are a delivery guy and you have a failure, you have a small disaster on your hands. So, it is a big deal.

**CEOCFO: *Employee frustration could also be a factor, is that right?***

**Mr. Murray:** Yes, but the common denominator is money and that is where businesses must realize - – that there is a huge cost in not keeping these mobile devices operational. A more dramatic example would be if a police officer is in a difficult situation and the battery in his radio fails and he cannot call for help. That is significant for any first responder. Having reliable power for these millions of mobile devices is important.

Despite GTS being in the business, all of these batteries look like lumps of coal to us. They all look the same so there is no way to determine which battery is good and which is bad. Another issue is that these lithium batteries are dangerous. The Samsung Galaxy Note 7 smartphone had only 35 failures of their smartphone a couple years ago, but it cost them some \$3 billion to resolve the failures. They had to recall all phones that were in the field to replace and recycle them. Likewise there are dangers involved in having batteries that sit around and do not get replaced. They become more volatile.

**CEOCFO: *How is GTS going to address the problem?***

**Mr. Murray:** We have talked previously about our Managed Services Group. Within that group we have developed a program in which mobile users do not have to buy batteries and worry about when and where they should be replaced. We have launched what we call Batteries as a Service (BaaS). With BaaS, we can go into any company and provide them with batteries, provide them with replacements as needed, put those replacement batteries where and when they are needed. Customers can pay as little as \$0.05 per shift per battery. Normally, a mobile device battery costs between \$20 and \$60 depending on the type. We break it down so that we can provide replacement, recycling, and testing all for \$0.05 per battery per shift. That is an important difference.

**CEOCFO: *Is someone physically going on the premises to do this?***

**Mr. Murray:** That is correct.

**CEOCFO: *How can you get the cost so low and how can you do the on premise work without interrupting the flow of work?***

**Mr. Murray:** Most of the users of these mobile devices are working more than one shift. If you take logistics and delivery people, they are going 24 hours. Retail is going all the time. Public safety is going 24/7. Healthcare and hospitals are running 24/7. It is not like one shift per day; we are talking at least two shifts per day.

We have also teamed up with a couple of groups, one of which is Field Nation and the other one is CompuCom. These are large field services groups who do technical work onsite. We have developed a proprietary tester that is about the size of a deck of cards. The probes on it will touch the battery to get a state of health reading. The Tester connects via Bluetooth to an app we developed that goes on a smartphone or tablet.

The worker can go into a facility and quickly test each battery, and the app will take the data from that battery and send it to our server. We can instantly tell if a battery is good or bad. With new customers we perform

what we call the *Fresh Start* program where we go in and test every battery at a location. For example, one Top 10 retailer has about 2000 stores and we went in and tested every one of them in a few days. We can pre-ship batteries to that location because we know what they have and we know, on average, that about 30% of the batteries will be replaced. We then have special Recycling boxes that are shipped directly to a recycling center as the replacement batteries are put in place. The new batteries we put in will have a different color. We will go back in six months and test again and replace batteries that are bad, and we will put in yet another color battery. That way, the company will cut out a significant percent of that 60% failure rate and the costs accrued from those failures because they will have all fresh batteries. In addition, they will have an effective recycling program. This is the most exciting development in the mobile power industry in a while.

**CEOCFO:** *Typically, would most of a company's mobile devices be in one spot?*

**Mr. Murray:** Generally, visits to these facilities take less than an hour. It is not disruptive and they can go in and test without interrupting the business at all. It takes just a few seconds per battery at each site.

**CEOCFO:** *Do you find that business is worried at all that somebody is tinkering with their devices or is it just routine?*

**Mr. Murray:** It is pretty much routine but what we have found, which is an interesting part of our program, is that retailers do not worry about batteries because they are focused on the customer. First responders are worried about solving real world problems. People do not want to think about batteries so they just go about their business and hope that everything works out all right. The break-downs are a surprise to them and then they have to deal with it. There is not really a process in place for dealing with these issues. It is a disruptive event when there is a mobile device failure. What we do is go in there and organize something that is disorganized and something that people generally do not have responsibility for.

We also deal with the recycling issue. If you take retail, for example, you generally have a minimum wage worker on the floor and maybe they are being paid \$10.00 an hour. They do not have the authority to throw away a \$33 battery even if they suspect that it is bad. The manager of that department is more interested in keeping the shelves stocked and keeping communications with customers going. This is one of those missed cost-savings opportunities that people do not worry about and would not know what to do about it if in fact they were concerned. So, we are stepping into a void where we can make a major difference.

**CEOCFO:** *How do you get attention and who do you approach at an organization to at least hear you out?*

**Mr. Murray:** CEOs and CFOs. One of the things we did early on, because we are describing solutions to problems that people did not know they had, was to describe the "hidden" problem that businesses have. Many have no with no idea this is going on in their facilities. The retail industry, in particular, has very low margins and is managed carefully – and there are more analytics in retail than perhaps any other business – yet this is an opportunity for savings and increased productivity that many of them were unaware of. We do see those 180-260 minutes of lost productivity and support as something that is very important but not generally recognized. Right now, CEO/CFO Magazine

is part of a program we have put together along with a public relations firm that we have engaged to go out and tell this story and to explain to businesses the opportunities for savings and for increasing profits and productivity.

**CEOCFO: *How do you work with your partners on where the batteries are maintained, where you ship them, how do you keep a sufficient inventory, what are some of the physical logistics?***

**Mr. Murray:** One of the reasons why we are the only suppliers that can do this is that we own our own tooling, we own our own designs, and we control our own manufacturing and quality control. We do that mostly in Taiwan. We have control over the entire process and then we work closely with our customers. When a customer is under our Batteries as a Service program we know very clearly what and when they are going to need replacement batteries. We can anticipate that pretty easily because we have the data. We control the entire process. We also control the recycling part of it. One other very interesting thing is that we will actually buy back the old batteries from our customers. We give our customers a credit against future purchases of \$0.50 for every lithium battery that they recycle.

**CEOCFO: *What has changed since you started the program?***

**Mr. Murray:** There is a major change that has occurred. When we started, we were committed to building the best batteries in the world that would make these mobile devices run longer and we developed excellent chargers that were part of that process. Then we realized there were other problems the customers had so we developed the services model. We have taken a product and evolved it into a product and service model. Companies can certainly buy batteries from us but adding the service component to this is the big change.

**CEOCFO: *What is the increase in batteries each year, how many new devices might a company typically add?***

**Mr. Murray:** It is continually growing. Retail has evolved from the bricks and mortar stores to online but as they go online they are building large warehouses and they have more and more inventory in those warehouses that need to be received, counted, packed, shipped and delivered. The use and need for mobile devices has increased as business has evolved. We are bullish on the entire industry. The industry is limited by battery power so that is where we step in. We manufacture better batteries that last longer, but we also have a business system that we provide to our customers, at no charge, that enables them to manage those batteries much more efficiently and to cut their costs at the same time.

**CEOCFO: *How do you work with various government agencies?***

**Mr. Murray:** One of the things I think everybody learns in dealing with the government is that you need to be flexible. We look at ourselves as problem solvers and we like to go into unusual situations. Some years ago we were dealing with the DOJ and FBI and helping them to deal with problems where they could not get funding, and that was the genesis of the idea of BaaS. We wanted to put mobile power on the same level as getting power coming out of the wall from the electrical company when plugging in an appliance. We provide "electricity in a box" and that box gets replaced periodically and we want that put on the budget as a line item, so that it just gets automatically funded rather than having a big deal about getting funds approved every other year. That was the idea

behind BaaS because batteries do not last forever and when funding was not available at a government agency we were concerned that battery failure might be blamed on us when it really was the issue of not buying replacements. We are talking now with a different government agency about providing them with a blue battery and a black battery because they want one during the day and one during the night and they do not trust the employees to rotate their stock of batteries so that one is charging while the other is being used. The idea, therefore, is that we have a blue one for day and a black one for night.

**CEOCFO: *Why pay attention to GTS right now?***

**Mr. Murray:** GTS provides an opportunity to make very significant savings that streamline the business to increase mobile productivity at no cost to the customer. We recycle responsibly and convert CAPEX TO OPEX.

