



Volume 6
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Technologies Solutions Group, LLC

Letter from the President :

Smoke'em If You Got'em...

Unless you live under a rock, you'll notice there have been a few changes that, as little as four years ago, no one would have imagined. A new administration will be taking office in January and, although it's inevitable that the Trump administration will make mistakes, it looks like we finally have an administration that is pro-business. It also understands that taking excessive capital from both small and large business, only inhibits growth and forces executives to look for unique ways to satisfy shareholders. We have changed our business plan multiple times over the last few years for this very reason.

Healthcare reform has been a nightmare, not only for small business, but individuals alike. TSG healthcare premiums increased 55% this year, while the programs offered aren't even as good on a variety of levels. I think you will see drastic changes in the next couple of years, not only in the way healthcare is offered, but the way entities pay into it.

Another major change moving forward is the legalization of both medicinal and recreational cannabis. I was a bit skeptical until we did the research on this remarkable plant. The general public is conditioned to think this is a dangerous drug and that people and hippies just get high on it. It has even been labeled a "gateway drug" because some experts say it leads to more serious co-dependencies and abuse.

The medical community has made unbelievable advancements using the beneficial attributes of the drug. The cannabinoid (CBD) element of cannabis has been found to ease general pain, chemo induced neuropathy, and nausea, as well as increase appetite and reverse wasting. It is also effective in controlling muscles spasms and seizures, healing damaged brain cells, protecting against the ravages of Alzheimer's, and is an effective antioxidant. When most people think of cannabis, they stigmatize with the tetrahydrocannabinol (THC) element which actually gets you "high". The combination of failure to control the crime element, the tax revenue and medicinal properties will force most states to legalize this drug by 2025. TSG is right in the middle automating tracking processes and working with industry leaders and state agencies to set up a "best practice" to regulate the industry from seedling through delivery and dispensary". Or as they say in the business, "seed to smoke".

No one knows what the future holds, but based on hard work and research, we feel TSG is positioned very well for unbridled success in the future.

Sincerely,

Tom Jackson



Sani-Track System News

TSG Expands CVS Offering

Over the last year, we have made great progress penetrating various applications within CVS. Along with supplying all of the infusion bag labels, barcode printers and after the fact support and service we have been successful in initiating another line to roll out throughout the pharmacies.

As you have read in our previous newsletter, CVS plans to roll out Sani-Track hand hygiene monitoring in all of their infusion pharmacies across the country.

This was in direct response to a contamination outbreak at one of their facilities. We have taken this concept a step further by putting together a sterility protocol which should keep the pharmacies completely free contaminate. SteraMist™, a product that guarantee's a 6 log reduction (6 Log reduction: Number of germs is 1,000,000 times smaller) in contaminate has been implemented in 3 pharmacies that are presently experiencing problems.

Using biological indicators (BI), we have already proven out that the products exceeds all standards they have in place. Presently, it takes 2 people 3 hours to totally disinfect a pharmacy and this is now done in 20 minutes with the SteraMist™ equipment.

The plan is to not only sterilize with this product at the end of the day, but sterilize product continuously as it enters the clean room. This, in conjunction with Sani-Track and real time monitoring, will assure the high sterility standards known in the industry. We are hoping this will be adopted as best practice and propagated to other companies that have labs, pharmacies and cleanrooms.





A glimpse into the future...



RFID Nips Marijuana Growing Problem in the **BUD...**

Since the early days of mankind's agrarian past, farmers have found ways to adopt the latest tools and technologies to improve agriculture. From hand tools to tractors, from combines to computer science, up-to-date innovations have been applied in ways that save time and labor, cut costs and improves yields. In recent years, RFID technology has found its way onto the farm. RFID technology is used to track items of all types, due to the speed and convenience of scanning RFID tags in bulk without requiring direct line of sight. Many industries use RFID for inventory management to gain greater visibility and accuracy throughout the supply chain, improving operational efficiency and raising profit margins.

RFID technology can raise more than profits; the agriculture industry is using the versatile technology to help raise crops. In fact, the technology has become particularly popular with growers of one specific cash crop — marijuana. As more states have legalized marijuana, either for medicinal or recreational use, a cornucopia of complex regulations have sprouted up around the industry. Because the drug is still illegal under the federal government, those states where it is legal have strict requirements to track plants from seed through supply. For example, growers in Colorado are required to track every part of every plant, even the compost, to ensure that no buds or cuttings wind up on the black market.

To address this need, growers have gone high-tech. The process of tracking individual plants presents a complex challenge, as plants are sent from the grower to be processed before being sent to the retailer or dispensary. After being harvested, plants are typically moved around from drying operations to trimming to shipping, and the excessive handling means a robust system is needed to track them. In order to ensure legal compliance, as well as keeping track of their valuable inventory, marijuana growers are using RFID tags and RFID readers to simplify and streamline plant management. With the potential to implement a fully automated tracking system using RFID, growers can easily maintain real-time visibility into their supply chain, tracking each plant all the way to point-of-sale, where taxes are assessed.

Beyond tracking plants to comply with local laws, the use of RFID to manage agricultural inventories allows valuable data to be collected for better forecasting. And in nursery or landscape settings, where trees and plants can cover a vast area, wide-area fixed RFID speeds and simplifies the location of specific items for faster order fulfillment.

What about the data? RFID is the first of two necessary components in realizing these benefits. The second is a big-data capable **IoT (the internet of things)** software platform that can collect, filter, store and analyze the data. Choosing the right platform opens the door to additional benefits. Growers use state-of-the-art methods to deliver as many as five crops per year by carefully tracking growing conditions such as light level, humidity, temperature, and soil chemistry. The right **IoT** platform provides growers with the ability to track these variables to provide real-time notification of changes and yield analytics to control and improve growing techniques. The time-honored industry of agriculture may be rooted in the past, but it's not standing still. And when it comes to the budding business of legalized marijuana, adoption of the latest technology innovations like RFID tracking for inventory management can mean the difference between high times or bust.

Russell S. Gardner

CEO/CMO



Strategic Partners Update:



Guardian Data Systems Selects TSG As Key Automation Partner:

Cannabis is now legal in a handful of states and the industry will need a software provider to drive everything from the grow and processing of the drug to the dispensing at the retail level. Guardian has positioned themselves as the lead player in the industry catering not only to eight different software modules but consulting as well. There is a major piece of the puzzle missing however in the offering. How will the front end automation piece be structured and what technologies will be used?

Technologies Solutions Group has been tasked by Guardian to perform a site survey at each customer who comes on board to make recommendations in which to automate processes throughout their workflow process. RFID, barcode, wireless communications and smart dispensers will be key to collecting and driving all the data to the proper enterprise module.

Although TSG is new in the cannabis field (most companies are), this does not deviate from other business and workflow models we have designed in the past. Originally, we thought this would reflect more of a horticulture model, but in actuality it is closer to a pharma model. Tracking product through each stage of processing and collecting specific data on quality control, waste and movement is key to a pharma workflow model. As we get deeper and deeper into installations, I'm sure we will find more and more areas to address while implementing solutions to very unique problems. We very much look forward to this challenge and see this opportunity as a huge revenue generator for TSG.



SteraMist™ Adopted By CVS Compounding Pharmacies:

Sterility protocols are extremely important for protecting the integrity of the formulary being created in the compounding lab. Quality control standards and liability if those standards are not upheld are first and foremost in the minds of pharmacy directors. TSG, working with CVS's top management, has developed a sterility protocol that should keep all contaminants and particulate out of the compounding area. A key component to this solution is a product called SteraMist™, manufactured by TOMI. Originally developed by DARPA to neutralize mustard gas, the formulation was bought by TOMI and developed into a misting system that will create an environment with a 6 log reduction in contaminants. This is being used by CVS, not only to create a baseline for sterility in their facilities moving forward, but the plan is to sterilize all product entering the pharmacy. This along with TSG's SaniTrack system and monitoring devices we have placed in the facility, makes for an environment that will maintain sterility standards throughout the day. Presently, TSG is working with other accounts that house clean rooms that are looking for the same results



Technology Update:

A Natural Transition

If you have not heard, Microsoft is ending its support for Windows CE devices beginning in April of 2017. These devices have been instrumental to the success of TSG over the past many years. They were reliable, easy to program and very flexible with respect to line-of-business (LOB) functionality. Unfortunately, their time is coming to an end, with Microsoft forcing developers to the Windows Mobile platform. When was the last time you know anyone with a Windows Phone?

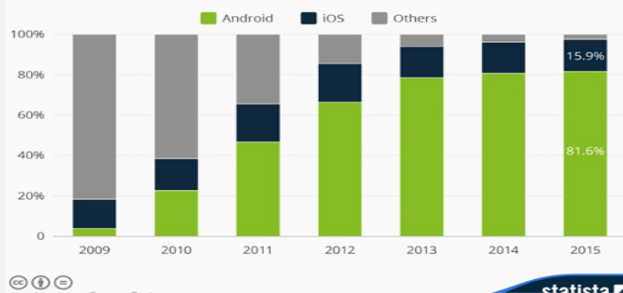
The natural step for TSG is not iOS, it does not have the flexibility and reach we need to develop custom applications. Also, applications need to be approved and funneled through the iTunes store, making them very restrictive.

In comes the tide of Android OS. The worldwide market for Android devices is projected to top 1.5 billion units in 2017 with market penetration of nearly 82%. That's huge! This is where TSG is putting most of our proverbial eggs. The Android development sphere is mature, robust and loaded with talent, and the development platform is free.

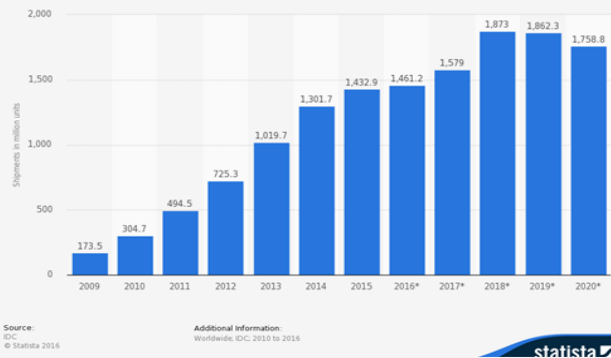
We plan on exploiting all of these advantages to provide the best-in-class mobile applications for our clients. Android applications (2.2 million and counting) are prevalent, devices are relatively inexpensive and the development environment continue to grow. We plan on taking advantage of all these factors in future development.



Android and iOS Are the Last Two Standing
Worldwide smartphone operating system market share (based on unit sales)



Global smartphone shipments forecast from 2010 to 2020 (in million units)*





THE of A.I.D.C.



Top Data Trend for 2017:

2016 was a landmark year for big data with more organizations storing, processing, and extracting value from data of all forms and sizes. In 2017, systems that support large volumes of both structured and unstructured data will continue to rise. The market will demand platforms that help data custodians govern and secure big data while empowering end users to analyze that data. These systems will mature to operate well inside of enterprise IT systems and standards.

Organizations will leverage big data from the get-go to drive value. A data lake is like a man-made reservoir. First you dam the end (build a cluster), then you let it fill up with water (data). Once you establish the lake, you start using the water (data) for various purposes like generating electricity, drinking, and recreating (predictive analytics, ML, cyber security, etc.).

Up until now, hydrating the lake has been an end in itself. In 2017, that will change as the business justification for Hadoop tightens. Organizations will demand repeatable and agile use of the lake for quicker answers. They'll carefully consider business outcomes before investing in personnel, data, and infrastructure.

This will foster a stronger partnership between the **business and IT**. And self-service platforms will gain deeper recognition as the tool for harnessing big-data assets.

TSG Employee Profile

Carol Jaworski; our new Office/Accounting Manager

Carol, comes to us from the healthcare side of the business where she previously worked for a retail pharmacy chain.

Carol Is a graduate of University of Maryland, Baltimore county (UMBC) and is interested in pursuing her masters in accounting at Stevenson University in Owings Mills MD.

Eventually she would like to earn her CPA's license after she meets the new educational requirements for the state of Maryland.

Carol is a seasoned accountant with great analytical skills working with financial statements and SEC filings. With over 20 years Experience. She'll be a great addition to the TSG team.

In her down time she enjoys her time on the Chesapeake Bay and reading novels by the fire.

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Carol Jaworski



TSG Investor Information

Technologies Solutions Group (TSG) is a privately held company with a targeted, diversified, strategic portfolio revolving around supply chain/work-flow automation products, hygiene protocol management monitoring, consulting services and on-site feasibility studies for all of the aforementioned products and services.

We service broad base of industries including; healthcare, pharmaceutical, pharmaceutical compounding, commercial warehousing, food processing and Marijuana growing campus co-ops, both retail and medical.

Our clients include, CVS, Under Armor, DAP, Med-Star, National Security Agency, Department of Labor, Perdue, Serta, Becton Dickinson, Holt Logistics, Rite Aid, General Dynamics, John Hopkins and other Fortune 500 corporations. We have structured TSG's offerings and filing documents to comply with SEC Regulation D requirements to include; Operating Agreements, Articles of Organization and all the necessary Subscription documents.

Should you be interested in TSG as an investment opportunity, please contact the following principles to receive our investment package and/or discuss the potential opportunity in detail by phone.

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