ceocfointerviews.com

Issue: November 14, 2016

CEOCFO Magazine

Product Managers, Software Engineers, IT Professionals and Consultants building out complete Production Environments

Richard Hurst
Founder & Chief Executive Officer

Hive Technologies
www.hivetechnologies.net

Contact:
Rick Hurst
850-866-6036
rick@hivetechnologies.net

Interview conducted by:
Lynn Fosse, Senior Editor
CEOCFO Magazine

"Whenever I hear bad news, I hear a problem that needs to be solved. What I like to do is take the domains that I have the most knowledge in and apply them into new domains. I take an area where I know how to solve a problem and apply to new area."- Richard Hurst

CEOCFO: ***Mr. Hurst, would you tell us about Hive Technologies?***

Mr. Hurst: Hive Technologies was designed to generate ideas and spawn off other companies. Even though we've developed product and performed services for various companies, our main goal was to stimulate tech sector growth in the Panama City area. To give some context, I worked for a medical device company and there was only one tech company in Panama City. We acquired a company in Ohio and I tried to hire twenty of those people and move them to Panama City. When I brought them down and offered them positions, all six figure positions, all twenty turned that position down. Perplexed, I went back to each one of them and asked them why they did not accept the position. The answer was the same across the board; that is that we are the only tech company in town and if they move their family and it doesn't work out, there's nowhere else to work and that they'd have to pick up and move again. Compounding the issues was that most of their spouses also had degrees and that there was minimal employment in the area for them as well. In the end, I was unable to recruit any of those employees and the medical device company that I worked for continued to struggle in its search for tech talent. This event was an eye opener to me, knowing that if our company were to move or shut down, we'd all have to move, that my family would have to move. This was one of several events that spawned the creation of Hive Technologies. Hive Technologies was originated to create opportunities that would in turn help to stimulate the local tech sector, even if there was no monetary gain. To date, Hive Technologies has spawned off software for the Hospitality industry, debt collection industry, both software and hardware solutions for the apiarian industry and several others. So we're basically group of high end software engineers looking to take on challenging opportunities that we feel will have the potential to form into its own company.

CEOCFO: ***What are you working on today?***

Mr. Hurst: It has taken a while to fine tune our identity, but what has formulated as we have navigated this journey is that we are a develop of task and asset management software. One example is the hospitality industry where we have developed a solution to help manage, task and track employees, so when the housekeepers go into clean rooms, they can receive their taskings through a mobile application, and the management can see their statuses across a dashboard. Another industry we are working with is the bee sector. We are developing sensing technologies that are now being used at the University of Florida, as well as, Barkman Honey which is the second largest honey producer in the US. Interestingly enough, it's the bee technology that's really taking off.

CEOCFO: ***How do you start to develop ideas when you take on a project?***

Mr. Hurst: I come from a medical background and the idea part comes from magazines and news and information from all different domains. Whenever I hear bad news, I hear a problem that needs to be solved. What I like to do is take the domains that I have the most knowledge in and apply them into new domains. I take an area where I know how to solve a

problem and apply to new area. For instance, I took the predictive analytics concepts of healthcare and reapplied that to the bee problem we call colony collapse disorder. By aggregating various metrics over time, such as blood pressure, heart rate and weight, we can predict and intervene before a catastrophic heath even occurs. I took that same concept and applied it to the bee sector. We are aggregating all this data together to formulate when a hive might collapse so that we can inform the bee keeper and researcher that this hive may collapse based on this information that we have allowing for early intervention. In short, I try to take a proven technology from one sector and apply to another sector to see if it will work.

CEOCFO: ***Do you have the funding you need or are you seeking partnerships or investors?***
Mr. Hurst: We are self-funded. For the beekeeping technology, we are about to go for our first round of funding not so much for the software but for the sensing hardware. We are about to scale up and we will be looking for funding to help scale to basically do the tooling and build out the molds for that hardware. We are in the process of doing the videos now for a crowd funding. Are we actively seeking partnerships or investors? No. Would we have interested in those conversations? Absolutely.

CEOCFO: ***Would you tell us about the bee industry and the need?***
Mr. Hurst: A beekeeper approached me and asked me if he could put his bees on my property and I said sure. I asked him to tell me more about the bee industry because I knew nothing about it. The more I learned about bees, the more I realized that there was a huge problem and the bees were dying in large numbers and nobody seemed to know why. I started researching them and learned more about them. I thought surely somebody was building technology to figure this out, that it could not be that difficult to solve. The more I researched I realized that nobody was doing such a thing. I set out on my own personal venture to formulate a solution to go after the problem. I started working with various beekeeping groups and institutions such as Florida State University and the University of Florida. The problem with bees is that nobody truly knows why they are dying. I worked with the leading researchers, such as Dr. Ellis, who many consider to be the leading researcher in the world. He is at University of Florida. When I go to the people at various universities, beekeepers and even the beekeeping sector, I asked the questions of what do you think, why do you think, and what is going wrong. They all tell me different answers. I also go to them and ask what if I provided you with this or that information, 80% of the time the answer is the same; nobody has ever done that before so we do not know. The consensus becomes that a lot of people think they know why it is happening but when you talk to everybody, nobody truly knows so it is still an unanswered question. We are hoping not necessarily to answer the question of what is causing the colony collapse but we are hoping to provide enough data to the researchers that they can answer the question. We are becoming the laboratory of information, or nurse if you will, that supplies all the data to the doctors so that they can give the diagnosis to what is causing the problem.

CEOCFO: ***What might you put in the mix of data that less detail-focused people might not know is important?***
Mr. Hurst: I first talk to the community. I ask them what they think is important. Secondly, I work with a lot of DoD people and one of the things they do at the Navy deals with acoustics. What we do for the bee sector is we record sounds and then we look for acoustic signatures similar to how they detect things under water in the military. I have a variety of experience in different domains so we bring that to the table. It may or may not work. I go to the experts and tell them I have an idea and ask them if they think it might work. If they say it might work, then we will give it a shot. What I find is engineers and people that are seasoned are trained to solve problems in certain ways. I take problems and go into elementary schools, high schools and I go to the children and explain a problem. I ask them to help me solve the problem. I integrate into the schools because I find that children do not have limits, they have never been trained on how to solve a problem so they can sometimes supply me with guidance on how I should approach a problem. Many times they give you outlandish answers, such as you should go to the moon and back. Every once in a while, a child will give you a response that you just look at them and say “wow why did I not think of that”. It is because they have not been trained or cultured in such a way where they are boxed in. They really think out-of-the-box so I love to work with children because they give me the ideas that us as trained professionals just do not think about.

CEOCFO: ***Sounds like you are having a lot of fun with this!***
Mr. Hurst: I really enjoy it! On my off-time, I do not fish or hunt, I teach. I teach at Florida State University and I go around to local schools and teach in the community for free. That is my passion and hobby so any time that I can take what I learn and convey it to others and get that flash-bulb moment of “wow I get this”, this is cool, that is what I love to do. I absolutely enjoy what I do.

CEOCFO: ***What is next for you?***
Mr. Hurst: I think the next point is we are going to continue with the research that we do with the bees and try to take on other challenging problems that we feel we can have an impact with, such as with law enforcement. Having a drone and working with augmented reality where they can detect an adversary on the other side of a wall. We will keep taking those

on. We're talking to local school board officials about the Healthy Hive technology. So we are getting all of this bee data at the University of Florida. We are working on how we take this and get young children involved. What we are developing is a new platform with this new character we've developed, this young lady we call Ana and her last name is Lytica, which is short for analytics. We are overlaying this onto our Healthy Hive environment, our dashboard and we are going to run a pilot program in Bay County at a local high school. These students are actually going to be involved in a real world problem working with the data that we procure from these research environments for the bees. This Ana Lytica character is going to teach them through this software how to look at data and analyze data. In short, we are taking the software that we have already developed and now we are going to try to teach young children how to work with data. We are going to repurpose the application to share the knowledge with the next generation of engineers that are coming up to prepare them on how to work with data.

CEOCFO: ***Why pay attention to Hive Technologies?***
Mr. Hurst: I think what makes Hive important is not so much the consumer at large as much as it is to the community at large. In the case of Panama City in north-central Florida, we are trying to home-grow the tech sector and we are also trying to teach the individual tech. When it comes to stimulating a tech area, you must have resources that know tech and companies that hire tech. One without the other does not work. People do not move here if there are no tech jobs and tech jobs do not move here if there are no resources. If our success continues, this could create jobs and could create additional research. Solving some if these problems will help us globally. It is not that we are trying so much to make a profit, we are trying to make an impact. I think people should pay attention to us just to see us make an impact and make an impact on someone's life. All the people that work with Hive Technologies have day jobs and this is what we do on our off-time. We all have good wages, so it not about the money, it's about making a difference in our community.