



**The Most Powerful Name in
Corporate News and
Information** All rights reserved!
ceocfointerviews.com
Issue: February 3, 2014



Real-Time Energy Usage Wireless Connection



Chris Tumpach - President

Rainforest Automation, Inc. is a private corporation based in Vancouver, BC. We make products that allow utilities and their customers to manage real time energy use. Our primary product focus is on the ZigBee wireless HAN (Home Area Network), and connecting the smart meter data stream to the premise and the cloud. Our open, standards-based devices enable “plug and play” access to the smart meter data stream – not only for utilities and end consumers, but also for third-parties, such as suppliers of home automation equipment, home energy management system makers, and providers of value-added cloud services.

Interview conducted by: Lynn Fosse, Senior Editor, CEOCFO Magazine

CEOCFO: Mr. Tumpach, what is Rainforest Automation Inc.?

Mr. Tumpach: The goal of Rainforest Automation is to connect users to their real-time energy usage. We work with utilities around the world that are deploying smart metering technology, and we make devices that go into consumer’s homes and into businesses, and speak wirelessly to those smart meters so that users can see their energy usage in real time.

CEOCFO: Are you replacing something that has been available, are you supplementing, or is it a new technology?

Mr. Tumpach: Basically, it is a new technology. There have been some products on the market in the past, which have required users to open up their circuit panel and wire something in. Our technology is new in the way that it connects wirelessly with the smart meters that the utilities are already installing. Because of that, it is much easier and much less costly for users to see this technology and to use it for the first time.

CEOCFO: Is it as accurate as a wired-in technology?

Mr. Tumpach: It is actually better because we are using the same data that your utility uses to bill you for your electricity usage. We actually get the real data from the meter. Any one of the technologies that have been around to date have basically just been approximations because they are not as accurate as the actual meter that is on the side of your house. We get all our information from the meter directly.

CEOCFO: Who is using your products today?

Mr. Tumpach: Our products are deployed in various locations around the world. Our biggest market right now is in California across the three major utilities. Consumers can go ahead, buy our products online through our website or through amazon.com, and use them directly. We have also been involved with utility programs in various places around the world where the utilities have given out our product during their programs and trials. For example, we are in Western Australia with a utility there, we have a deployment in Guam, and we have a deployment on the island of Kuwait. We are in various parts around the world in various deployments.

CEOCFO: When would people be utilizing a device?

Mr. Tumpach: Most people have never had an energy monitor, and do not really know how they would use it. What we found is that most people use it initially to just figure out what takes power in their house. An example of that could be that when they first get the device, they actually walk around their house and turn things on and off such as their air conditioning system. They know it is expensive, but they do not know how much. They will turn on their dryer and see right then and there how much power it is taking. We have all been told to turn and off the lights, and I think most people get surprised that lighting takes such a small amount of power compared to everything else that runs in your house. That is one way that people use it. Another way that people would use the technology is if they have a very high bill and they have been surprised over the last couple of months. They get a huge bill in the mail and they wonder how that happened. People either buy our product or some utilities will give away our product to users who have high bills. They can go and figure out what is taking power in their house, and usually it is something silly such as the garage heating being left on.

Something like that could cost you upwards of a \$100 a month. We had a user in one of our programs whose hot water tank broke in the crawl space and they did not know. They were looking at the device that they see every day when they come home, and that is actually a quite common way that people use these things. They do not stare at it all day. When they walk by it, they have a look at the numbers and it tells them 1,000, which is great and is a number they are familiar with. This person had the device for about a month and he noticed that the number had been really high for the last couple days. He wondered what was going on so he went around his house and turned everything off. He still saw that his power use was very high, so he went up to his water tank and found out it had sprung a leak. It was basically draining away into the drain beside his hot water tank and had been doing that for the last couple days. Rather than have a flood and his hot water tank burst, he was able to shut that off and replace it before there was any catastrophic failure.

CEOCFO: Are you selling directly to consumers? What are the ways that you reach your end customer?

Mr. Tumpach: The utility in some ways are what we see as a channel. They are motivated to give away our product to reduce energy usage or to improve their relationship to their customers. At the end of the day, the customer is the end user, which is either the homeowner or a business owner. People have been getting our products through a few different ways. While some get them through their utility, we actually have quite a few people buying our products online. We have a presence on amazon.com and on rainforestautomation.com where people can just go click and buy the product. Some of the utilities will even provide rebates for our products.

“Utilities are increasing the cost of electricity over the next few years. In some cases, it is going up significantly. What is going to happen if people do not have monitors is that they are going to get sticker shock. They are going to get their bills and ask what happened. That is just going to create a huge backlash for the utilities and the users. We think that by having a real-time monitor, people will be more comfortable with those rate increases and can deal with prices that vary throughout the day.” – Chris Tumpach

CEOCFO: Rainforest offers a number of different models. What are some of the differences?

Mr. Tumpach: I see our products split into two different areas. One is our display product and the other one is our gateway product. Our EMU line, of which the most current model is the EMU-2, allows you to see real-time energy usage on an LCD screen that is on the product itself. That is really great for people who want to be able to walk by the device at any time, see what is happening and have a dedicated device that they can put on their kitchen counter or next to their door and see their energy usage in real time. What we found is that there are a lot of people who really like to see their energy usage on their smartphone. They have an iPhone or an Android device and they want to see their energy usage wherever they go. To that, we built our EAGLE product. The EAGLE product is unique in the way that users can not only browse to the device from their PC or smartphone when they are home, but they can also choose to send that real-time data to one of our partners. What our partners allow them to do is see their energy usage while they are away from home, set up alerts and compare their energy usage with other people as well. This brings a huge extra level of engagement for the user where they can start to understand their energy more and make it a little bit more fun.

CEOCFO: You are selling the outright device? Is it a one-time sale or is there a continuing revenue model?

Mr. Tumpach: We actually do not require the user to purchase any sort of ongoing subscription fee or anything. All the user has to do is purchase the device and away they go. For the time being, most of the cloud partners we are working with offer their services for free to the users as well. It is actually quite a good experience for the user. In the future either ourselves or our partners could offer even more advanced services, where there might be a small monthly fee. For the time being, it is just buy it once and away you go.

CEOCFO: Is that the goal eventually or do you anticipate it being profitable selling the devices?

Mr. Tumpach: It is always interesting. People say that there is no profit in selling devices, but I would point to this company called Apple that has actually done quite well just selling physical devices. We do think there is a good way to be a profitable company selling devices. At the same time, we understand that a lot of our customers are going to be wanting more and more features and do not want to always buy new devices. We built our devices so they are upgradeable. If there are additional services, we do plan on offering some of those in the future.

CEOCFO: Do you foresee a time when this might be standard and when people might have a monitor along with their everyday items?

Mr. Tumpach: I think so for the simple reason that utilities are increasing the cost of electricity over the next few years. In some cases, it is going up significantly. What is going to happen if people do not have monitors is that they are going to get sticker shock. They are going to get their bills and ask what happened. That is just going to create a huge backlash for the utilities and the users. We think that by having a real-time monitor, people will be more comfortable with those rate increases and can deal with prices that vary throughout the day. It just becomes something that is an integral part of the

house. I think that over time, some of these systems might be integrated into security systems and other things like that, which people already have in their home. We have built our products to be able to inter-operate and work with any technologies that go forward. Yes, I do think energy monitoring will become something that is pretty standard in those homes. How they get that information will differ as we move forward.

CEOCFO: *How will Rainforest Automation be different a year from now?*

Mr. Tumpach: We have some exciting stuff we are working on. What people are going to see is that up until now, we really focused on the monitoring side of the business. It is telling people how much power they are using and how that is being used throughout their house. We put the automation in their name because we do want to automate some of that for users to go forward. I think a year from now people are going to see that we are going to be introducing products that allow you to manage your energy a lot better and allow our products to manage it for you.

CEOCFO: *Why pay attention to Rainforest?*

Mr. Tumpach: We are a small company that has had tremendous growth over the past year. We are connected with most of the major utilities across the US and many internationally as well. We have recently signed resell agreements with all the major smart meter companies in the world. There are a lot of exciting things happening for us in 2014, and our growth is going to skyrocket as we go forward.

BIO: As part of his role as president, Chris is responsible for working with strategic vendors and customers to enable Rainforest Automation to create leading-edge products. Prior to co-founding Rainforest Automation, Chris was a senior design engineer at PMC-Sierra where he architected communications ICs that power the Internet. He has also held product design positions at Raytheon Systems, Alcatel, and Mindspeed Technologies. His experience in the areas of Hardware Engineering, Integrated Circuit Engineering, Software Engineering, and Web Design put him in a unique position to lead a company that integrates these various disciplines seamlessly. Chris holds a Bachelor of Applied Science in Electrical Engineering from the University of British Columbia.



Rainforest Automation, Inc.

2nd Floor

34 West 7th Avenue

Vancouver, BC, Canada

V5Y 1L6

604.630.4287

www.rainforestautomation.com