Ceronix Makes a Positive Difference in ALL Environments

BETTER

ECOSYSTEMS

By Ed Ring

Don Whitaker's company, Ceronix, located in Placer County between the Auburn airport and "The Ridge" golf course, has put it all together. Ceronix has created a better natural environment, a better workplace environment, and created a company that can thrive in today's environment of international competition. Improving so many environments at once requires sustainable and synergistic investments, and Ceronix has figured out the formula. All their ecosystems are better.

"Ceronix was started 20 years ago in a garage as a monitor company, and the orders kept coming in," said Whitaker, founder and Principal. How he got Ceronix from there to here is a classic story of a successful high-tech entrepreneur, mixed with the inspirational decision Whitaker made to invest the steady profits from his company into creating a sustainable business. Had Whitaker not made the choice to invest in sustainability consistently over the last twenty years, formidable new competition from China, Korea and Malaysia would have Ceronix fighting for its life by now, instead of prospering.

Today when you go to a bowling alley or a casino pretty much anywhere on earth, there is a good chance that Ceronix built the monitors that show your bowling scores, or the screens showing hands of playing cards and whirling wheels of berries and bars on video slot machines. Rugged, color correcting, bright, power-efficient, customized, new and replacement monitors like these are bought worldwide each month by the thousands, and Ceronix can make them better and faster than anyone.

Being a successful manufacturer of custom gaming monitors requires Ceronix have the ability to operate on less than 20% gross profit. Against competitors who are often subsidized or pay lower wages, it's not easy. Fortunately for Ceronix, having gaming monitors off-line can be very expensive and quick turnaround allows Ceronix's crack engineering team, handpicked by Whitaker, to win more orders. But engineering brilliance and sustained innovation, while necessary and admirable, may not be enough.

Sustainable Business Is More Competitive

The brutal world of global commerce is an ecosystem – only the strong, efficient companies survive. Ceronix is a thriving organism in the implacable competitive, totally globalized ecosystem of value-added electronics manufacturers. Ceronix has achieved unusual financial sustainability because Whitaker has parlayed Ceronix's nearly two decades of growing yearly profits into investments that have systematically and dramatically reduced his overhead, converting cost-centers into profit centers. It's important not to understate the importance of having profits in the first place, but even more rare is a small profitable company that plows the profits back into the corporate ecosystem in ways that will yield a long-term ability to compete.

Whitaker's first step towards greater sustainability was to eliminate debt. Avoiding the temptation use debt financing to leverage faster growth, funding for growth instead was limited to profits from operations. Instead of making interest payments, Ceronix earns interest on their excess cash. In 1999 Ceronix moved into their present location, occupying a 63,000 square foot building on a 21-acre site; the company owns the land and building. Ceronix has spent nearly $9.0 million on their property and plant, which now includes a satellite building with paying tenants. Instead of lease payments, Ceronix collects rents from their extra space.

"Today's video monitors don't turn obsolete very fast," said Whitaker, "and LCD's are still four times as expensive," so Ceronix doesn't worry too much about getting stuck with their vast inventories, which currently have set them back about $8.0 million, and only turn three times a year. Racked at least as high as the highest rack at a giant warehouse store, stretching along a wall that nearly spanned the width of the 1.5 acre building, stacks of monitors waited on pallets for the eventual forklift, customization, and journey to some bowling hall or gaming hall in the world. Add bells and whistles and ship it tomorrow? No problem. Instead of paying rush charges, Ceronix wins the rush orders.

"It's nice to have fun and create a nice environment," said Whitaker, a company owner who obviously values his employees. As we toured his company he greeted everyone with genuine good cheer; the engineers, the assemblers, the truck drivers, the warehouse workers and the office staff. The company has a go-cart in the warehouse that runs on an electric motor and can silently whiz a human over the indoor acre of smooth concrete like a giant hot wheels car. There is a flock of wild turkeys and domestic chickens, free ranging in a single hybrid pack over the property, surprising newcomers in the parking lots or along the sidewalks leading to the building, tame enough to know humans sometimes provide snacks. It must be fun to work at Ceronix.

To get the best employees Whitaker has cost-effectively added huge value to the compensation packages he can offer, by having not only a company funded health plan and retirement plan, but by investing profits into on site high-quality exercise equipment and health training, including an outdoor exercise course. In addition, Ceronix offers employees regular chair massages and yoga classes. Especially valuable is an on-site day care center for young children, which is efficiently and thoughtfully located next to the company cafeteria. Much of the costs for these benefits are for building and landscape improvements that are only incurred once. When bidding for the best and the brightest employees, Ceronix has already invested in an awesome facility, and can offer extras that replace the need to go find day care or join a health club.

If the story stopped here, Ceronix would be an extraordinary company, but in fact Whitaker was just getting warmed up. His next steps make Ceronix not merely a corporation ran with sustainability that calls to mind the impeccable financial conservatism of Swiss bankers, but a gift of sustainability to the environment, and an example of industry in harmony with the earth.

Sustainable Business is Good for the Earth

Ceronix pays no interest, rent, or rush charges, and they've successfully invested to build a better workplace for employees. Ceronix is also systematically lowering its environmental impact, reversing the huge associated costs to the company.

Ceronix has permanently deeded four acres on their property free from development, with beautiful oak woodland as the result. A local arborist makes regular visits, and when trees die they are replaced with abundant saplings. By not trying to develop every nook and cranny Ceronix undoubtedly made the permit process for what they've built much less costly. Another way Ceronix reduces costs is by compacting into bales the tons of cardboard they use. By preparing the cardboard waste this way Ceronix adds value to the material and has since found a company that will pick it up for free.

A dramatic way Ceronix saves costs is by pumping their own water from a deep fissure well that can produce 90 gallons per minute. This well supplies water for landscape irrigation on the property. As part of this proprietary plumbing system for the property, Whitaker has spent $600,000 on a half-million gallon pond that includes 200 feet long, four-feet deep recirculating stream filled with 80 tons of gravel. This stream provides biological filtration, something certainly appreciated by the several thousand Koi who inhabit the roughly one-half acre pond, complete with a small wood pier, an automatic fish-feeding machine, and a paddleboat. Because the pond is not lined, much of the well water as well as otherwise wasted rainfall run-off is returned via percolation to underground aquifers. Ceronix consumes water but with their percolation pond they also put water back into the system.

"There's an eagle that takes a big Koi about once per month, and there's Herons and Egrets that show up about once per week for smaller Koi," said Whitaker, obviously pleased the pond's ecosystem has increased the food supply for the neighborhood's big native birds. The Koi arrived when the pond was finished three years ago, serendipitously in the form of a pet storeowner who had about 1,000 large Koi and a customer who cancelled their order. Whitaker took the Koi, and the Koi prospered and multiplied.

Manufacturing the best customized high-end, low maintenance video monitors in the world takes a lot of electric power, as does a 63,000 square foot building, as does a half-million gallon pond with well pumps and filtration pumps and 21 acres of landscape watering systems. Saving the best for last, grabbing the best tax incentive program in the history of the industry, in early 2003 Whitaker placed $1.8 million dollar investment – half of it directly refundable through California utility rebates – into covering his 1.5 acre roof with the best photovoltaic collectors money can buy. The resulting 400-kilowatt system, currently about half complete and up and running, will pay for itself in only 40 months. A forty-month payback on an investment into a system that will last 100 years, and will turn Ceronix's energy bill into another profit center.

"I don't know why everybody doesn't do this," said Whitaker, as he climbed onto the roof of his building to display nearly an acre of his roof already covered with panels. Each panel was about 2 feet wide and 4 feet long, each of them tilted only slightly towards the south so as not to shade each other during winter when the sun crosses east to west lower in the southern sky. "These cells generate 14% efficiency," (meaning 14% of the BTUs of energy in the sunlight hitting the cells are converted by the cells into actual electric current) said Whitaker, "These are the best using single crystal cells." As Whitaker explained, the system is built to last, "after 100 years, these crystalline cells are rated to still produce electricity at 50% of their original efficiency."

Since Ceronix requires at most 200 kilowatts of electricity to operate, by building an array capable of a 400-kilowatt output in full sun will mean Ceronix will, cumulatively, put much more energy into the power grid than they will consume from the power grid. Moreover, because the sun is brightest when

electricity demand is highest, they will sell this electricity back to the utility at the prevailing high rates during peak hours.

Everything Whitaker does, as a long-term capitalist, is done to last for the long haul. The photovoltaic system is no exception, as seen in the choice of high-efficiency collectors, so durable that hundred years from now, Ceronix will still have no energy bill. The surface of the roof is covered with a reflective white surfacing to help the building reflect heat during the summer. A sprinkler system is being installed, that washes the collector panels each day, to cool them and to clean them, maximizing their efficiency and increasing their life span. The collectors themselves, placed on racks and positioned about a foot above the roof with airflow beneath them, cause the building to require far less air conditioning. The inverter, a refrigerator-sized device that converts the direct current from the roof collectors into 240 volt AC to power the building, is the best you can get.

"The inverter lists for $150,000," said David Dwelle, founder of Pacific Energy Management, who is building the photovoltaic system for Ceronix, "and with good air cooling the system can last up to 45 years instead of 15 years." Needless to say the inverter at Ceronix was equipped with a substantial air conditioning system, humming vigorously. Pacific Energy Management, a manufacturer that integrates the finest available materials to build high-efficiency, long life photovoltaic systems, is quietly stepping into the limelight as they complete this high-end system at Ceronix. The 400-kilowatt array they are building will be the biggest private industrial installation in the Western United States, and one of the finest of its kind anywhere.

Whitaker was born in North Dakota and raised in Oakland. The genial 59 year-old graduated from Oakland City College and early in his career worked as a machinist making mechanical calculating machines. He worked at Lawrence Berkeley Labs from 1963 to 1973. Before founding Ceronix in 1985, Whitaker, along with several others, founded Kevex, a company that produced lab equipment. Ceronix supports several community programs and Whitaker himself serves on the Sutter Hospital Foundation Board, the Placer County Advisory Board for Sutter Hospitals, the Auburn Chamber of Commerce, and the Auburn Rotary Club, to name some. Whitaker's commitment to the local community comes from the heart. "The USA is the best country in the world, and California is the best state in the USA," he said, continuing "and in California I think the Sierra foothills are the best place to live."

"I want to create a great environment for families, for employees, and for the community," said Whitaker, commenting on his approach to business as well as personal priorities, "I think all corporations should do this." Whitaker's Ceronix has created better environments by creating a better company ecosystem, alongside creating a better natural ecosystem on their land – making a positive difference for humanity alongside the earth.

Author Ed Ring is the CEO of EcoWorld, and can be reached at ed@ecoworld.com