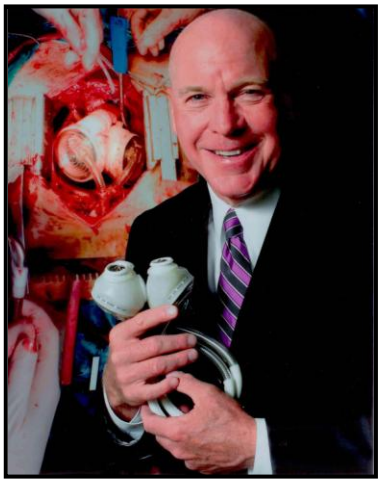
Resuscitating the Artificial Heart



A Heart to Heart interview with Rodger Ford, former CEO of SynCardia Systems, by Michael E. Gerber, NY Times best-selling author of the E-Myth Revisited.

Michael: Good to visit with you today Rodger. I know that you have taken my work with the E-Myth to Heart…and applied it so successfully to SynCardia's development of the Artificial Heart. Just how did a guy with no medical device background resuscitate the Artificial Heart as successfully as you've done at SynCardia?

Rodger: I learned early in my business career that being a technician who believes that knowing how to do the technical work of a business enables you to build a business that does that technical work is the single biggest liability of a business leader; in short, the technician turned entrepreneur is a combination destined to fail. As you taught me so well in your book, The E-Myth Revisited, if the founder of a company doesn't know how to do the work then he would have to learn how to get work done through others. For example, in the case of my first company, AlphaGraphics, I didn't know anything about printing. And in the case of my second company, PetsHotel, I didn't even have a dog or a cat when we invented the company. In the case of SynCardia, the Artificial Heart Company, my success in building my first two companies became the key ingredient to the resuscitation of the Artificial Heart Company. Had I, instead, been a Heart Surgeon, a Cardiologist, a Mechanical Engineer, Biomedical Engineer, Clinical Supervisor an Electrical Engineer or a Polymer Scientist – all necessary technical skills for the work SynCardia was built to do --I probably would have focused on the wrong issues than the ones I did focus on.

Michael: Well then, what comes first? Just how do you get a business off the ground, or how do you redirect or reinvent a struggling or failing business?

Rodger: The entrepreneurial vision has always come first for me. Yes, you've got to wallow around in the business to see what's missing in it, but without a clear vision of what the business is going to accomplish when it's done, all of the knowledge a technician or a manager can bring to it will simply lead everyone around in circles at the bottom of the company, rather than where we really needed to begin, at the top of the company, where I've learned the real vision lives. In other words, whether it's about fixing a broken business, as I did at SynCardia, or creating a new one as I've done many times, you need a clear vision as to how the business will look when it's done. What you call in The E-Myth a "mature" business.

Michael: So what you're saying, Rodger, is that successful founders have to have a clear vision of their companies……..what the companies will look like and act like when they're finally done?

Rodger: That is exactly right and easy to say…..however, when it comes to that kind of vision, I've discovered that there are very few founders who really walk their talk. They use the word, but they don't put it into action. The breakdown comes when the people in the business, including the leader, become hopelessly immersed in the technical aspects of the business and ignore the business vision. That's when problems arise, confusion emerges, the business loses focus and what you call in your books, "the entrepreneurial seizure" occurs. Everybody gets caught up in the trivia of the business, rather than in the strategic outcome of the business.

I believe strongly that it's the job of the leader to continue to evangelize the business purpose and pathway to the future, and to clearly articulate it every day, day in and day out, to his or her people. If not, the technicians and managers in the company become so immersed in problem solving – or, better put, survival strategies -- that the business loses focus. Michael, you refer to this breakdown as working IN the business as opposed to working ON -- the business, the way an entrepreneur needs to do.

In my case, I saw my job as what I've come to call "The Good Leader", to be a coach for my people, working with them and their teams to drive the vision deep into the ranks. To encourage them to take care of the business at hand, while evolving the business systems and products. This is the hard part because otherwise everyone gets caught up in the transactions rather than developing the system to manage the transactions. A Good Leader is constantly challenging his people by driving the vision deeper, and testing and challenging their understanding of the business proposition and values, in short, the business' Vision.

Michael: Then would you say that the first and most important step following developing a vision for the business is to design and produce a framework to work on the business?

Rodger: Yes, absolutely. And the first step for me is creating the business system. Before launching AlphaGraphics in 1970, I spent one full year writing and designing the SOPs, the standard operating procedures. I was raised in Downey California, the home of Taco Bell. A friend of mine provided me with the Taco Bell SOPs with the understanding that I would use them only for a pattern of SOP design for AlphaGraphics. So, long before you published the E-Myth, I worked on designing AlphaGraphics from the top down and bottom up as if I were going to build 1,000 stores…….just like Taco Bell did, and we ended up building nearly 500.

In the E-Myth you encourage designing a business as if there will be 1,000 more just like it. This theme provides the focus necessary to design a platform that can be duplicated from one store to the next, from one city to the next city, and then to the next state, and, eventually throughout the country and around the world.

Michael: I understand that AlphaGraphics was the first business of its kind in the Soviet Union is that correct?

Rodger: Yes, our first Soviet Union store opened in 1986 in Moscow on Gorky Street. McDonalds became our neighbor six months later. The Moscow store was the largest volume store in the AlphaGraphics network. In other words, we built the AlphaGraphics System, and we replicated it there. When interviewed by CBS, the reporter asked the Moscow Store Manager to describe what made the AlphaGraphics Moscow store such a success……She stated in an Arnold Schwarzenegger accent "Ve follow da system."

Michael: You speak of softscape and hardscape systems. Can you provide me an example of a hardscape system?

Rodger: The best example I can provide is a system described by you in the E-Myth. You were frustrated with your office's white board hygiene. Seems that when the white board was erased the wall on either side or top or bottom was smudged with the eraser leaking past the board. You held meetings, published an SOP on board cleaning, but only when you installed a Lucite border around the board to prevent the eraser from leaking off the edge onto the wall did the wall stay clean. In other words, you built a hardscape system.

An example at AlphaGraphics was the installation of the LazerGraphics System. AlphaGraphics was a quick printing shop. We printed from "Camera Ready Originals". In order for us to print something the customer was required to provide us an original. Our store sales plateaued at $250,000 annually.

During 1984, to solve this problem, we installed self-serve Apple Macs and laser printers in The AlphaGraphics stores. The Macs were loaded with templates for letterhead, envelopes, business cards, newsletters, flyers and more. The work stations were free. Customers were turned loose to be creative.

We hardscaped the original creation process in 1984, and turned it over to the customer to convert a "*camera ready idea"* to a *"camera ready original". Originals were flying at us as customers unleashed their creative juices. As a result, our average store annual sales grew from $250,000 to $1,000,000 per store! Talk about a revolution!* In other words, we hardscaped the process and installed a system that made our customers and our people extraordinarily successful. The E-Myth describes that a business with a strong and repeatable business platform

helps make ordinary people extraordinarily successful. That's exactly what we did, not only at AlphaGraphics, but in every company I have ever built since.

Michael: Speaking about that, let's jump 14 years forward to 1998 and the PetsHotel. What made you believe that a Hotel for Dogs and Cats would have a chance when there already were 14,000 kennels in the USA?

Rodger: Simple. At PetsHotel we didn't think like a kennel. We developed the PetsHotel to emulate the experience of a hotel, a spa, and a day care center all in one. We targeted the female customer who thinks of herself most often as the primary parent of the pet. We hardscaped our PetsHotel facility so that the surfaces were impervious to moisture, which meant that our facility, unlike most pet kennels, didn't harbor bacteria and therefore hadn't any offensive odors. Like a hotel, spa, or day care facility, we developed a reservation program that worked just like a hotel reservation system did. Our customers loved it. Not only did they equate us with a hotel, but our early and late checkout, grooming (spa) and day care (i.e. child care and recreation) services immediately distinguished us from the competition. We had large rooms and smaller rooms and many of the large rooms had telephones. Yes, our customer, the parent of the pet, as we thought of her, could call in to talk to her pet! Nobody had ever heard of such a thing before we did it!

And just about everything we did and provided our customers was hardscaped into the way we conducted business. Understand, many of our positions paid a few dollars above minimum wage. So, our employees were unskilled, and in most previous jobs they had, poorly motivated and trained. In our case, however, most of our people performed well above our expectation…they were supported by a hardscaped and intuitive business system where we paid really important attention to them, and to how they worked and learned. So at PetsHotel our people were ordinary people made effective by desire combined with an effective system that led to high esteem and tremendous customer satisfaction.

Just go to any PetsHotel today and you'll see what I mean. It's now owned by PetsMart and most every PetsMart store has a PetsHotel inside. The program is better now as a result of PetsMart's dogged dedication to customer satisfaction delivered via an effective business system and dedicated, supported and empowered people who are completely invested in the PetsHotel vision.

Michael: Let's move to the heart of the matter, if you'll pardon the pun, and my real purpose for this interview, Rodger. How is it that you can be successful in so many and varied endeavors… ….from Real Estate Development to Printing to PetsHotel to resuscitating the Artificial Heart at SynCardia?

Rodger: I first read the E-Myth Revisited in 1986. You had just published that extraordinary book. No sooner did I begin to read it, but suddenly my practices and methods were validated. For me, you became the prophet from another land. I bought the E-Myth on tape for every

employee. I wanted them to hear your passion. The E-Myth became the first read of all our new employees at AlphaGraphics, and in every one of my other companies, and the frequent brush up read of every employee. I built games and contests around the E-Myth material. You were the prophet, who I called my 6th man, my wingman, and the enforcer of everything I taught from that point forward. In a way you might say, you've been with me in every one of my ventures.

Through my evangelism of The E-Myth and Michael Gerber, my people developed a deep understanding of the principles of the E-Myth, and I was able to accelerate one outcome after another. We talked in the short hand of the E-Myth. My mantra became one of compressing time to accelerate outcomes.

Michael: But Rodger, you didn't answer my question. My question is just how did the principles of the E-Myth impact the Artificial Heart? What was SynCardia like before you pitched in?

Rodger: 55 years of hard work, disappointment and dead ends preceded me. Beginning with Dr. Willem Kolff, a Dutch pioneer in the field of artificial organs who built the first Artificial Heart prototype in 1950. Dr. Robert Jarvik then popularized the Jarvik 7, but in 1991 in an action that stunned heart researchers, the FDA withdrew its approval of continued experimental use of the Jarvik artificial heart because of deficiencies found in its manufacture, documentation and vigilance.

SynCardia was formed in 2002 by a group led by Dr. Jack Copeland which included Marvin J. Slepian MD, Richard Smith PHD, and Robert Sarver, Arizona's best known entrepreneur. In 2002, I invested in the A round of financing and joined the board later the same year. The company was operated by previous employees and directed by Marvin J. Slepian, Chairman and CEO.

In October of 2004, SynCardia was granted an FDA approval to allow implantation of the Total Artificial Heart…however, by then, SynCardia was out of money and was selling just 20 Artificial Hearts a year at an average price of $25,000 each. Business systems necessary to live up to the standards set by the FDA didn't exist and inventory control of raw materials, finished product and drivers in the field was shamefully inadequate. When I got there, 35 of the original 82 Total Artificial Heart drivers were accounted for, and the remainder vanished in the field. Yes, 47 unsupervised drivers for the total artificial heart just vanished! To understand what that means, it takes a driver to support an artificial heart and thus 47 patients at any given time were deprived of the gift of life ….in short, without a driver, they couldn't benefit from the use of our Artificial Heart!

To make matters even more frightening, SynCardia was denied a reimbursement code by the centers for Medicaid and Medicare. Without a reimbursement code the Artificial Heart and the implant procedure weren't covered by insurance.

And as you know, Michael, during all that time, the Total Artificial Heart was made by the talented and small hands of only a few skilled and dedicated technicians. It took a true master technician to build one of our hearts, and we couldn't find people to do it. When you came to SynCardia and spoke to the entire team in 2006, you were surprised at just how fragile SynCardia was, and admonished me that until we installed reliable, leveraged, and scalable manufacturing systems we couldn't possibly expect to fill the great need out there for our product. And you were right. Despite all the time and money and work which it took to get SynCardia to the point when you met us, when I joined SynCardia its systems were more antiquated and complex than a start up or even the most difficult turnaround project.

Michael: What was the first step?

Rodger: I concentrated on installing the system. Good systems trap exceptions and help turn chaos into order. Do you understand my point? Without a system foundation all well-meaning people individually do what they feel is right, whether it is or it isn't, and collectively what they do often magnifies chaos. Systems on the other hand, allow a business and its team members to conduct activities and transactions with the freedom and clarity that detail will be trapped and tracked with the result that customer satisfaction will result. So, to me, great systems were key.

But, let's get back to when I started at SynCardia. I began my role as CEO in May of 2005 and within 5 days the FDA showed up with an unscheduled audit…..a surprise. The audit lasted 10 days. A 30 minute review was conducted by the FDA auditor at 11:30AM and 4:00PM each day. After just a few days a pattern emerged – SynCardia had inadequate systems for document control, inventory management, Corrective And Preventative Action (CAPA), design control and more…… It maintained its books in Quicken!

It became so obvious to me that even before the FDA audit was complete the SynCardia Board of Directors authorized the purchase of a Master Control document management system and the Expandable Accounting modules of General Ledger, Inventory Control and Cost Accounting.

The systems weren't easy to implement. Good Habits are HARD to come by and EASY to live with, and Bad Habits are EASY to come by and HARD to live with. It took us 2 years to "groove" the new systems into our operations and persuade our people to abandon old habits. And discarding old habits is difficult. I maintain that it takes 20 consecutive repetitions to "groove" a new habit. And if the chain is broken, if the good habit gets lost and the bad habits come back again, then we had to start all over again with one and produce 19 more like the first. It was so difficult during that time that 13 of the original 16 SynCardia people departed and new fresh people joined us to, as we called it, "ride for the brand".

The principle is to begin any enterprise with a solid system foundation or platform which allows ordinary people to become extraordinarily successful. That is not to say that the best talent is not

essential to any business, but no matter how talented your people are, to produce consistent results I've found that talent has to be leveraged on a systems platform.

Michael: How did you recruit and build your teams at SynCardia?

Rodger: Some people by necessity were recruited from the industry. Quality, regulatory, clinical and clinical sales people were recruited from the medical device industry. All other positions were filled from the Tucson pool.

Whether at AlphaGraphics or PetsHotel or SynCardia, I've always got my eyes open for good people. At SynCardia we installed what we called a "people filter" which was incredibly efficient and reliable. I carried the personality profile evaluators with me wherever I went. When I located a good prospect – and I would find them everywhere if I kept looking -- I told the SynCardia story, provided them with the profile and unknown to them, I held a pre-employment interview then and there and immediately got the ball rolling.

For anybody who's interested, our Human Resource System for recruiting and evaluating people is available on the Anthem Equity Group site. We provide it at no charge to those who are interested. --------http://anthemequity.com/library/

The key to this process is always be alert for good talent, eliminate those that don't fit early and fast, and devote time to those that do fit and can contribute to the company..

Michael: And Building the Team?

Rodger: Building the team is never ending and building a good team requires building a dynamic culture. People want to be involved. They want to make a difference. They want to contribute……..

For example, at SynCardia I held an all hands company lunch every Friday. In the 6 years that I led SynCardia I missed very few lunches. Although the lunch was social, every person had an opportunity to contribute. As a discussion began, others were asked to contribute. It was unknown when a person would be called on. They could not prepare. They were all asked to contribute and often when they least expected. Sort of like a Family supper.

This process encouraged people to know their subject and to know the subject of others.

Dale Carnegie teaches that if you know your material you can discuss the subject before any audience and at any time. It's very difficult to hide from my style of management. You have got to participate and play or you just don't fit! There's no room in my companies for those who don't have an oar in the water and row in harmony and rhythm with the others. My function is that of the coxswain. I organize and steer the company and coordinate the power and rhythm of the rowers.

Michael: You described SynCardia as a "science project" when you stepped in as CEO. Did you have a plan in order to move SynCardia from a "Science Project" to a successful operating company?

Rodger: Yes I did. My partner and I designed the plan and allocated the time required to execute the plan. I believed that with 18 to 30 months of good work we would be able to transfer the company to a new CEO. My partner and I were assured, by the then CEO, that the artificial heart drivers contracted for development by SynCardia with German manufacturers were well underway and would serve the company well. Subsequently, and not until we were in the boat, my partner and I were astonished that neither the planned hospital driver nor the planned portable discharge driver were functionally adequate. We discovered this flaw and many others after launching our plan.

Action steps necessary to unlock the value of SynCardia were straightforward. My first step is always the same: Inventory the business systems and install or improve systems to assure that chaos is captured and order is consistently achieved. I can't over emphasize that this first step is essential. Many take short cuts and all that do pay the price!

Once the systems platform was installed then our plan was to populate SynCardia with excellent talent in key management roles. The talent had to be like minded and preferably talent that we had worked with in the past. Talent that understood our offense and defense play book.

The total artificial heart was not reimbursed by the Centers for Medicaid and Medicare (CMS) and obtaining reimbursement codes was necessary for survival. What seemed to be straight forward required 3.5 years of determination and effort. The result was a new reimbursement code and the highest reimbursement ever provided by CMS.

Capital is essential to any enterprise and the best form of capital is the excess cash that remains after the sale is made and expenses and overhead are subtracted. The next best form of capital is equity or investment by shareholders. And the most egregious and insidious form of capital is debt. Consistent with that, our plan at SynCardia was to sell what was on the shelf while we modified and improved scalable manufacturing processes and launched new technology.

Enroute to success we did just that: we produced sales and raised new equity in like amounts, and not until we had raised $53MM in new equity was the company ready to stand alone. We avoided debt until it was certain that we would make it through the narrows. The darkest hours occur when capital sources have been stretched or exhausted yet profitability and cash flow are within your grasp. When debt is layered on too early it may be the straw that broke the camel's back. The straw that lost the company! Well, at SynCardia the straw didn't break our camel's back, she is alive and well. And, difficult as it was to nurture her every step of the way, we finally came to that precious point where we were ready to find and put into my place, our replacement CEO.

The job is not yet complete. Today, SynCardia is destined for either a public offering or a sale to a larger and allied company. That's the job of the board and the new CEO Michael Garippa, and they're headed in the right direction.

Michael: Some day you and I will think back on this interview and remember that it launched the Book, the book I know you're going to write about your extraordinary experience creating, designing, building and growing the great companies you've built. Are you ready to do that, Rodger? When can we expect your book?

Rodger: It's in my head, even as we're talking about it here, Michael. It's going to be a book built upon my experience at breaking free of the boundaries other people put on the world. That great businesses aren't built by extraordinary Team Members, but by ordinary Team Members doing extraordinary things. For ordinary Team Members to do extraordinary things, Systems are needed to compensate for the disparity between the skills of Team Members and the skills needed to produce the predictable and extraordinary results articulated by the Vision we start a venture out with. If the business model depended on unique, highly skilled Team Members, it would be impossible to replicate.

To discover and surface the necessary systems it's important to return to what the customer wants. "How can I give my Customers the results they want systematically, rather than personally? How can the system produce personal results?

The customer is served while our people are working in the business, but our customers are best served – and I would say, only served --- as a result of our people working ON the business – in order to design, and build an evolving set of business systems.

Michael: I could see the twinkle and gleam in your eye Rodger as you described SynCardia. I know that there are so many stories within the story of all of your companies, which are important lessons to those facing the kind of difficulties you've had to overcome. So, all I can say now is let's get to work on that Book!