Interview With Pat Yanahan—What Engineering Entrepreneurs Need to Know About Marketing

Pat Yanahan, President of USA Strategies, Inc.

I met Pat Yanahan in the mid-80's when I asked Tom Barry, publisher of Control Engineering Magazine, to make me a recommendation on an advertising agency. He told me to use the same firm Control Engineering was using. That recommendation led to a long personal relationship with Pat Yanahan. Pat keeps our company honest by continually challenging us about the clarity of our marketing message. He is both an engineer and marketer, and engineering entrepreneurs would benefit from his wisdom. I spoke with Pat about his career and about marketing in the Internet age.

Thomas: When did you first gain interest in electronics?

Yanahan: Like many young boys I was fascinated with electronic toys. I received my first amateur radio license at age fifteen.

Thomas: Where did you attend college?

Yanahan: While I was in the Navy I took correspondence courses when we were at sea and went to local community colleges when I was stationed on land. After the Navy, I went to the University of Illinois in Chicago and then to the Illinois Institute of Technology for graduate work. I could not have done it without the G.I. Bill so I fly the Navy flag every Veterans Day.

Thomas: Tell me about your Navy career?

Yanahan: I was in the Navy during the peak of the Cold War. I was attached to the nuclear submarine ballistic missile program where I had the opportunity to travel both above and below the water. I got to play with really big and serious electronic toys. I spent two years in school before I went to sea. This along with the constant continuing education gave me a head start when I went back to the civilian educational system.

Thomas: What was your first job out of college?

Yanahan: I worked at Sylvania as a production engineer in their hospital communications division. It was a job that required design as well as manufacturing engineering skills. Then I went to Motorola as a technical writer while going to graduate school.

Thomas: What prompted you to go from engineering to the dark side; that is marketing?

Yanahan: My last engineering job was at Perkin-Elmer. As fate would have it the sales training director died so they threw me into the job as a temporary replacement. I had to travel, write proposals, give training seminars, and work with the advertising agency to write ads and brochures which I really enjoyed. When I look back to my schooling, I did exceptionally well in literature and writing—far better than in my engineering classes. That should have told me something. But my calculus and differential equation courses at UIC were very helpful in getting through marketing classes in statistics and demographic analysis.

Marketing, advertising, and public relations are true professions just like engineering. The schooling, apprenticeships, and competence in these professions are as exacting as any other. Unfortunately, there are many so-called "marketers" who are self-appointed experts.

Thomas: Did you join a marketing firm after Perkin-Elmer?

Yanahan: My first marketing position was with Ketchum Advertising and onto Young and Rubicam where I worked on consumer marketing programs which included advertising in national magazines and TV commercials. The systems approach, research, and project definition requirements were very similar to an engineering project. They just had to be done in weeks and not months.

Thomas: I always found it interesting that print media publications would hire an advertising agency. What did you do for these firms?

Yanahan: Trade magazines have to sell advertisers on placing ads in their publications so we would develop programs to support the sale of ad space. But we did far more than that; we developed new magazines, seminar series, and we were early in developing Internet products. We became an outside product development source for the publishing industry.. Today, we do that same type of development for technical product companies as well as packaging, food, and beverage companies.

"Unfortunately, there are many so-called 'marketers' who are self-appointed experts."

(No part of the Extension may be reproduced without the written consent of Contemporary Controls.)

Thomas: People in our industry grew up with publications such as Control Engineering, IAN, InTech, and Plant Engineering. How has print media changed in the last 20 years?

Yanahan: Many magazines have gone out of business, but the major magazine "brands" that you mentioned have expanded to include Internet products, shows, seminars, and direct mail programs. To the reader the measure of a magazine is the quality of the editorial contained within the covers or on the web site. To the advertiser the measure of success is how many qualified buyers react to their advertising message.

The reader gets the magazine for free so the revenue comes from the revenue generated by advertising support. Magazines and web sites are in the business of providing blank space for the advertiser to place his message whether it is good or bad as to the quality of the message delivery. This model is going to have to change. I believe the reader will and must pay if there is content of value from these major brands. New delivery systems are providing the designer/reader of the publication with the ability to find and obtain design information and even assistance. Online tutorials, seminars, training, and links to other users are real services that the design community must realize is worth something.

Thomas: At one time we received "bingo card" responses to ads. Now we receive nothing. How do we know our ads are effective?

Yanahan: We did a major research study over five years ago that identified that "bingo cards" were the least used form of response to an ad. Even today 800 numbers, e-mail, and fax are the order in which people respond if they are really interested. Literature collectors fall into the last bucket, and they used the bingo card most often. Now with the Internet you don't have to collect literature. It is all available online.

It really is the advertiser's responsibility to put measurement systems in place. With 800 numbers and e-mail, anyone seriously interested in your product is going to contact you. The true problem is that most ads are terrible in that they do not present a reader benefit. Engineers want to be spoken to in clear and direct English first. Most ads don't offer anything or even ask the reader to do anything that would generate a response. I do not mean a free iPod, but something that helps in understanding the product offering. The offering of White Papers, CD's, and samples still generate response. If by luck people do call, unfortunately they usually get a recording rather than an intelligent human who can help them.

"To the reader the measure of a magazine is the quality of the editorial contained within the covers or on the web site. To the advertiser the measure of success is how many qualified buyers react to their advertising message."

Thomas: Is print media dead in the Internet age?

Yanahan: Print magazines are not dead nor will they die soon. Bad ads in print are dead. When you travel look at all of the magazines that are on the news stands. Even if flexible thin screen notebook computers are commercialized within the next few years, the mobility of magazines will still be a comfortable medium for us to use.

The Internet and all the new electronic delivery systems will complement magazines and each other. For example: when Apple introduces a new iPod they run radio, TV, magazine, point-of-purchase, direct mail, Internet, and public relations all simultaneously to reach their market. This is a very important point: You have to tell people six times before they hear you. Most small technology companies expect a miracle after running one ad one time. Human behavior just does not work that way. Like Ohm's Law in your field, there are certain laws in marketing that are fundamental.

Thomas: How did the dot.com bust and 9/11 affect your business?

Yanahan: They were devastating. We lost over half of our business, we were stuck with significant bad debt, and the world developed a lack of belief in advertising. It was predominantly a lack of understanding of marketing because so many phony dot.coms were spending their investors' money on so much advertising with no regard to generating real sales and income. I still remember dot.coms spending millions on Super Bowl commercials just for ego satisfaction.

In retrospect these major events were an inflection point that forced us to reinvent ourselves. Advertising is now probably less than 20% of our business. The biggest portion is market research, new product strategy, and development. We now have three offices in Europe and one in China.

Thomas: What mistakes do entrepreneurial engineers make when promoting their products? What wisdom can you give them?

Yanahan: All of us are exposed to hundreds of advertising messages every day which makes us all experts in advertising. There is just too much bad humor, borrowed interest, and bad graphic design in technical magazines. What is missing is a clear presentation of what will the product do for the engineer buyer? How will it contribute to the final product in which the component or software will be included?

One of the procedures we follow at our company is to evaluate which ads work well in a certain market. The behavior of engineers is totally different to medical doctors. Each of the major "brand" magazines in any industry will research their readers to determine which ads generated the most readership. They will share this data if you ask. I am not exaggerating: engineers want data and charts and proof statements while doctors want cartoons and simple text.

Thomas: How can companies' best use the Internet to promote their products?

"This is a very important point: You have to tell people six times before they hear you. Most small technology companies expect a miracle after running one ad one time."

Yanahan: We did our first Internet project in 1985, and I can safely say that the Internet is still in its infancy today. With bandwidth constantly increasing, we will see radio, TV, cable, cell phones with video capability—everything merging into one seamless medium. The Internet is now at the point where the delivery of business-to-business TV commercials is practical and doable. This now gives companies the ability to talk and show their prospects what their offerings can accomplish. But the fundamental is still communicating what the product does and how it is really different than anything else. This is the issue; not which medium is used to convey the message.

In our company we have networked our staff and some of our customers together with video conferencing over the Internet. Not HDTV yet, but very acceptable.

Thomas: You have seen technologies come and go. Ethernet has been here for over 25 years. Will it still be here in 25 more years?

Yanahan: I do think so. The hardware and communications links will change, but I think the fundamental protocol will remain. Much like 120 volts at 60 Hz has remained since Mr. Westinghouse proposed it way back.

Thomas: What emerging technologies do you see that will have a big impact on our industry?

Yanahan: Whether you call it nanotechnology or enhanced polymer chemistry, it is coming. The ability to "print" chips, circuits, displays on simple plastic or paper substrates is going to allow the embedding of control systems into the machine or device with more functionality than we have ever dreamed possible. We see machines on the floor talking to each other via the Internet already. The addition of video conferencing at the machine with the operator or maintenance staff is obtainable even now. What could be next?

Thomas: So do you see any emerging technologies that will have a big impact on your industry?

Yanahan: The development and adoption of RFID tags on every individual product sold in grocery stores will be the biggest issue to affect marketing and advertising in history. The ability to track, monitor, and record every product's location and selling price is massive. I think the ability to tailor marketing messages to the shopper in the store at the time of purchase will change the balance of dollars spent on consumer advertising forever. The privacy issues can and must be addressed by both the technology and marketing community. We are working internationally with major suppliers and consumer product manufacturers to address these development issues.

Thomas: We see all kinds of marketing books being sold. What titles would you have on your shelf?

Yanahan: I hate to admit that I still have my undergraduate 101 text book in my office: *Ogilvy on Advertising* by David Ogilvy. And the most useful current book is *Strategy Pure and Simple II* by Michel Robert. These are two of the best fundamental books I have found and use.

Thomas: Who were your mentors? Who would you put into the "hall of fame of marketers?"

Yanahan: Really two. The first was Irv Rebeschini who was the engineering director at Perkin-Elmer who later ran Simpson Electric Company. He would kick me out of his office unless I knew more about the technology and cost of marketing a project than he did. Bill Marsteller was the icon of the industrial advertising business when I started in the field. In our industry he was as respected as Shockley or Bardeen in the technology field. The firm Burson-Marsteller is one of the largest public relations firm even today. He had the exact same operating principles as my engineering mentor, and I still use his training books for my staff.

Thomas: You have done business in many parts of the world. How has globalization affected the U.S. controls industry?

Yanahan: I see more choices for the customer and also more confusion. We work for companies in Europe and Asia and have an observation to share. We Americans think that the EU and Asia have forced a homogenized economy in each respective region so we can do business there just like home. Unfortunately, if you want to sell in a country you have to have local presence. People want to do business with local support and not a web site or calls forwarded to the United States.

"The development and adoption of RFID tags on every individual product sold in grocery stores will be the biggest issue to affect marketing and advertising in history."

Control systems are critical to a plant operation particularly if it is running 24/7. If something goes down, they don't want to wait for the U.S. to wake up or the two-day air express shipment.

I also notice a difference in the philosophy of engineers. In the U.S. the engineering community puts significant demands on manufacturers, suppliers, and distributors for engineering assistance or even total engineering solutions. In Asia, we see the engineers wanting all the technical information so they can do the pure research and development themselves. I cannot quantify this observation, but my partners outside the U.S. agree.

Thomas: Would you subscribe to the notion "Invest in marketing and innovation. Everything else is expense?"

Yanahan: Not only subscribe but scream it. In too many companies, R&D and engineering are isolated from the customers and the market. There is not enough market or competitive research being performed by even big technology corporations. Projects with large dollar budgets are undertaken with little analysis of the end consumer of the product or service. Heaven forbid companies go out and ask their customers what they need before jumping into a development project.

Marketing is not just creating ads. It is doing everything to listen as well as talk to the customer. Too often, when we are engaged by a company, we find the solution within that is provided by an employee who has not got the ear of senior management. But he talks to the customers every day and knows what is going on in the field. To me, that makes marketing the job of everyone in the company. Surround the customer and do everything to satisfy their unmet needs; even if that means answering the phone and responding to e-mails 24/7.

About USA Strategies, Inc.

USA Strategies is a marketing and communications firm that provides the technology and packaging industry with research, development, and marketing strategy for new and existing products. With offices in Europe and Asia, the company assists its clients in identifying markets and customer groups and then developing communications programs utilizing both traditional and electronic marketing methods.

Patrick Yanahan, President, is a former electronic engineer who has been employed with major technology manufacturers. His post-engineering career began at major advertising agencies before founding USA Strategies, Inc. The company web site is www.usa-strategies.com.