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CONSULTANTS AND ENTREPRENEURS

The dinner speaker at the ACC&CE January meeting taught many of us in attendance some new things about a hot word that is much in fashion these days: ENTREPRENEUR. This writer got a new slant on the relationships between entrepreneurial and consulting activities.

Let's start with an accepted definition. "Entrepreneur, one who assumes the responsibility and the risk for a business operation with the expectation of making a profit. The entrepreneur generally decides on the product, acquires the facilities, and brings together the labor force, capital, and production materials. If the business succeeds, the entrepreneur reaps the reward of profits; if it fails, he or she takes the loss." <(Microsoft Encarta)>

The United States economy owes a lot to entrepreneurs. Because of them many new businesses have been started and hundreds of thousands of jobs have been created. Tax revenues have grown faster than economists and planners expected.

Many of the news stories about this phenomenon have concentrated on the small-business aspects of the growth. But are all of these businesses small and are all of them the work of entrepreneurs? Is the new business a spin-off of a large corporation? Is it a "mom-and-pop", self-owned small operation? Or is it, perhaps, a new entity created by an entrepreneur, as defined above, one that has been sold by him or her at a profit to others and in which he will not be a day-to-day participant?

A given entrepreneur may or may not be the originator or owner of the product or service idea. He or she may stick with the new business after it gets established, as advisor or shareholder. To be an entrepreneur in the classical sense he or she will be motivated to take the risk and create the nucleus of a new company strictly by the profit gained when the costs of making it happen are less than the proceeds of the sale.

In real life, such strict divisions don't exist. We can expect to find three phases in most new businesses: finding the idea or product; building the company; operating the company. What we want to consider here is the role of the specialist consultant and what personal qualities in that consultant make him able to handle the middle, entrepreneurial phase.

The entrepreneur must have these qualities: a restless urge to originate an operation; the strength to work single-mindedly to gather the capital, people and physical means to carry it through to survival; and the desire for short-term profit gained by selling it. It is not necessary to have hands-

on ability to manage the technical detail. The risk-taking factor and the restlessness would seem to be essential.

Some technical consultants have the entrepreneurial urge; others never had and never will. The entrepreneurial ones bring the high-risk, high-worry component that drives them to live on the brink of failure and feed on the dream of eventual success until they succeed or fail and then go on to do it all over again!

But many of the most competent and knowledgeable consultants do not want to be entrepreneurs. That does not mean that they--together with the entrepreneur--won't want to be part off the inventive, fact-finding phase of a new enterprise or work with the management of a newly-created company, bringing strong technical knowledge and problem-solving skills to the production, technical service and planning stages of the business venture that succeeds.

CONSULTING FROM THE BOONDOCKS, By Heinz Trebitz

Driving from my place in Vermont to New York City takes 5 hours at best. A flight from Lebanon Airport to Newark costs \$500, and Delta has just announced that they will discontinue their service. Fortunately, most of my consulting activities in the area of environment, health and safety can be run from the home office using phone, fax and e-mail and Federal Express.

I've done this now for 7 years. A good portion of the material safety data sheets (MSDSs) and safety labels I generate are still being sent hard copy. But, during the last year, e-mail has proved to be a much quicker and less cumbersome communication tool.

I have found that e-mail communication is most efficient when the work product is created and polished to final form in a word processing program in my computer and sent to the recipient as an "attachment" to an e-mail message I have written to my client or colleague. This is the fastest way to include a document in an e-mail message. The recipient retrieves the document from his Internet mailbox and starts working with it. Both sides can review such document, revise it and print it at either location in final form.

Here are some lessons I have learned on the way to success. I may have to follow Government regulations that dictate that information like the MSDS and labels must be supplied in a standard format. In other circumstances, I may want to arrange the information to fit the style the client prefers or recommend a special layout that I consider efficient or "professional". Another factor peculiar to my practice is that my clients and correspondents may be in Europe where they use a page format somewhat longer and narrower than the American 8.5 by 11. Slight differences in document margins and proportions may play havoc with the lines and alignments you want to send.

I have had to learn that the transmission of a basic e-mail message over the Internet is limited to a restricted assortment of letters and characters. A document prepared in a word processing program contains many additional, invisible, characters that contain the information about margins, spacing, type fonts lines and many other details that show up only when working in that word processing program. These will be transmitted to the recipient within the "attachment" referred to above.

The final lesson I have learned in sending attached documents is that for the recipient to have the

least trouble reproducing on his computer screen or printer the same document I have on mine, he should be using the same word processing program I am.

This should suffice but, in some cases when my European client is having printing problems, I have been known to decide it is time for a business trip to work with him in person.

WHO HOLDS THE MOST PATENTS?

Did you answer Thomas A. Edison? You're right, but few people would know who may come second in number of U.S. patents held. It is Jerome H. Lemelson, who died at 74 on September 28, 1997.

The New York Times obituary tells of a man who, before going to college, where he gained 3 engineering degrees, did complex weapons design work for the Army Air force and started a model airplane business. After college he worked on a Navy project developing rocket and jet-propulsion engines. After that he became an independent inventor.

As an independent he had a hard financial time and, as he often complained, many difficulties with the examiners at the U.S. Patent Office. These often held up royalty payments due him because of delays engendered by examiners who forced him to resubmit and subdivide his applications.

Lemelson had his rewards, though belated. In 1992 he forced a group of Japanese auto makers to pay him \$100 million for the use of automated manufacturing systems he had invented almost 40 years earlier. Some American and European manufacturers also paid up, but Ford, Chrysler and General Motors are still holding out.

The once-struggling inventor became a philanthropist, giving to colleges and universities and the Smithsonian Institution. One bequest is for a college program to stimulate creativity and teach would-be inventors how to protect their intellectual property. Lemelson's place in the rolls of patent holders still awaits the final action of those nit-picking examiners at the Patent Office on Lemelson applications.

INTERNET SITES OF INTEREST

ENTREWORLD, [www.emkf.org], Email:infocel@emkf.org, is a site representing the Ewing Marion Kauffman Foundation, an educational and support organization which operated "Supporting Entrepreneurship" channel especially for those working to help entrepreneurs succeed. They supply a myriad of educational goods including tapes, books, CD-ROMs, reports and curriculum material for teachers and coaches. The foundation supports entrepreneurhisp in many ways. Some are school classes. Others are training courses for business people.

ENTREPRENEUR NETWORK

The Entrepreneur Network [www.TENonline.org], E-mail address: edzimmer@TENonline.org is a

non-profit corporation dedicated to helping Midwest inventors and entrepreneurs through information and connections. It maintains a national 800-number (1-800-468-8871), publishes a monthly newsletter and maintains web pages. Among the departments are:

- Business Opportunities: For investors, entrepreneurs and others looking for new business deals.
- New Products Wanted: Manufacturers and salespeople looking for new products.
- Private-Sector Resources: Technical and business support resources.
- Membership Organzations: Other resources available to inventors and entrepreneurs.
- TEN Articles: Articles published in past TEN issues.
- Recommended Sites: Links to other sites that inventors and entrepreneurs.

YES, WE HAVE NO NEUTRONS

That's the title of a new book that tells eight stories of what the author, A. K. Dewdney; calls "bad science". Dewdney is an Associate Professor of mathematics at University of Western Ontario. It is Dewdney's thesis that investigators both sincere and fraudulent can do bad science by departing from the strict rules of the Scientific Method. He reduces this to the sequence: Question; Hypothesis; Observations; Conclusions (with publication).

The author gives several motives for such bad science. Among them are these: a consuming desire for early recognition of creativity or brilliance; a need for producing seemingly scientific evidence to support a quest, a business or a professional practice; or experimentation that is initiated by having advanced technology that is not dedicated to true science and using it to gain funding to keep the laboratory operating.

Dewdney indicts the public's fascination with science and technology as magic and miracle and the media's feeding of that fascination. This often draws good scientists into disclosing early results before the refining process of publication and replication by other competent investigators is completed.

The title of the book derives from the sad story of two Utah chemists and their cold fusion fiasco. The other seven cases include N-Rays, Freud's science of psychoanalysis, SETI, IQ as "science", theories of racial differences in intelligence (The Bell Curve), Biosphere 2, and neural nets as models for a human thinking mechanism.

The book is entertaining and also serves as a caution to anyone generating data or issuing reports of testing. Not all conclusions are based on "science". Some may be wish fulfillment or be slanted to serve a hidden purpose.

COUNCIL CORNER JANUARY 1998 MEETING

Meeting at Fornos Spanish Restaurant in Newark NJ, Council dealt with several significant items. One new member, Meyer Steinberg of Melville, NY, was accepted into membership. Angelo Tulumello reported on his efforts to generate more feed-back from clients on the CHI activities. Vice President Armbruster reported on speakers for future dinner meetings. Dick Cowell reported

on the activity at the Chem Show in New York in November and asked for a volunteer to take charge of the ChemShow booth for Year 1999. J. Stephen Duerr and Martin Goffman gave an update on the ACC&CE web page [www.chemconsult.org]. They proposed more upgrading of the page. Council decided to discuss it again at the next meeting. This includes authorizing the computer consultant to start work that will eventually result in all members having their scope sheets be part of the web page and the elimination of the printed directory. The cost of the consultant's work would be offset exactly by not spending the money already budgeted for the printing and for overtime work by the office in its preparation.

COUNCIL CORNER FEBRUARY 1998 MEETING

In the meeting at Clam Broth House in Hoboken, NJ, Council approved the membership application of Dr. Eugene N. Bilenker of Crown Food Consultants of Elizabeth, NJ. The Executive Secretary reported receipt of CHI contributions from Meyer Rosen and Bill Allen.

The Internet committee (J. Stephen Duerr and Martin Goffman) asked for formal approval of expansion of the ACC&CE web page, as detailed in the adjacent January report. In addition, they proposed a means for providing printed copies of the Directory on demand, with the requester paying the cost. The Executive Secretary would order commercially printed and bound or stapled copies from a computer-file copy. Council approved both plans.

Marketing committee Chairman Bill Swartz presented another analysis of member retention statistics. This showed starkly that, of the current membership of 116, approximately 50 are the "core" long-term members with tenure of over 10 years. He stated that new members are not getting enough from membership to stay in. He proposed running "focus groups" of members to find out what new members expect to gain from joining. Swartz also recommended development of a plan to answer the question: "Where are we trying to go?"

Membership chairman Dan Kruh announced that he was working with the editor of Chemical and Engineering News (ACS) on recognition of ACC&CE's 70th anniversary.

SPEAKERS' CORNER JANUARY 1998

The speaker after dinner at Fornos on January 27 was Dr. Marlo Christensen of the George Rothman Institute at Fairleigh Dickinson University. He introduced his topic, Consulting and Entrepreneurship, and led a lively discussion, bringing out the many interpretations that exist for the concept of entrepreneurial activity. Dr. Christensen taught that the concepts of ownership, financing, risk, management and profit all need to be considered in describing the makeup of the true entrepreneur. Not all of the consultants involved in the talk-back dicussion had the same view on the use of the word "enterpreneur". The intense interest of the audience led this reporter to dig deeper, the result being the lead article in this issue and two suggestions of Internet web sites.

SPEAKERS' CORNER FEBRUARY 1998

- a WELCOME page with "links" taking one to four subsidiary "frames" or pages;
- a CHEMICAL CONSULTANT page with means to see a "directory" of part of the membership currently signed up and a "referral" section where a client can make a specific request for help (this is sent directly by e-mail to the office where it becomes a new CHI);
- a MEMBERSHIP page with information and an "application" section where a new-member prospect can e-mail an interest to join;
- an ACTIVITIES section with information on past and future meetings;
- an INFORMATION page that gives access to other relevant Internet sites, information of getting help in setting up new Internet sites and a means for sending an e-mail message to ACC&CE.

The speakers forecast addition in the fourth quarter 1998 of the following:

- Posting the scope sheet resumes of all members;
- Addition of a sophisticated "search engine" for the scope sheet section, allowing prospective clients to select members and contact them.
- Creating a bulletin board or "chat" section--for members only--for informal interchange of messages.

FROM THE EDITOR:

Entrepreneur became a theme for this newsletter as we started preparing copy after Prof. Christensen's talk after dinner on January 27. You will find the theme expanded in the lead article and at the "Internet Sites of Interest" section. We would expect that some of you will have reactions to what appears in this issue on the subject of entrepreneurial begavior among consultants. Speak up! Please consider writing a note to ACC&CE or sending E-mail [Peter-Hay@worldnet.att.net] with suggestions, beefs, kudos or news. Send a "letter to the editor" on any subject and we will print it. Peter Hay, Editor

