Dr. Phillip S. Wilson

8799 Peach Orchard Road, Hillsboro, OH 45133 Phone: (937) 764-1496, Fax: (937) 764-1496 pswilson@voyager.net or www.inspiredinnovations.org

INNOVATION EXPERT

I am Dr. Phillip S. Wilson. I am an expert in the process of innovation. For over forty years I have led development teams ranging from a few to nearly two hundred engineers, scientists and technicians. Everyone who reads this will have used several of the products that I or my teams developed.

For the first one third of my career, my responsibilities grew rapidly and I was promoted and rewarded frequently. During this time my first thirty-four patents issued. I became the youngest inductee into GE's Inventors Hall of Fame.

I have always been driven to apply the principles of Better, Faster, and Cheaper to the development process. I studied many different approaches to the innovation process. These ranged from various techniques developed at leading business schools; to those used by innovation consulting firms; to those promoted by various corporations like Toyota's massive QFD process; to a variety of experimental design techniques; to publications by various management gurus; and including interesting processes like the Russian TRIZ process.

What I found was that most of these were time consuming, labor intensive, expensive, of limited usefulness and much too slow to yield strong competitive advantages. It was not unexpected to learn that these usually required the expensive use of outside consultants in order to achieve even mediocre results.

I made note of the useful parts of each of these and began to formulate my own ideas. During this time the innovative, commercially successful new products; highly efficient new manufacturing processes; and unique new materials systems that we had developed received several national and international engineering awards. I personally received the Society of Plastic Engineers top Innovation Award. This publicity led to several companies contacting me concerning Director or VP positions in their Engineering or Development organizations.

I began the middle third of my career as VP of Technology for the Textron Automotive Company. Over the next ten years, we grew this company from five plants in two countries and \$210MM in sales to thirty-three plants in four countries and \$1.6B in sales. ROS went up at nearly three times the rate of sales. We had licensees of our technology in seven countries. Early in my tenure in this position I found the last technique needed to complete my Inspired InnovationsTM process and we began applying this process to every development project.

The process is easy, fast, cheap and highly effective. It enables you to generate lots of ideas, to consolidate these into a small number of fundamental concepts and then to evaluate these concepts against a datum. It enables the team to clearly identify the concepts that offer the greatest opportunity for success. Even more importantly, it helps to define any critical technical questions or unknowns that need to be answered. This helps to avoid the common problem of falling in love with an idea only to spend precious time and resources before discovering that there is a critical flaw in the concept.

During the evaluation stage we were almost always able to come up with new hybrid concepts that took advantage of the best parts of two or more of these original concepts. These Super Concepts usually led to strong portfolios of intellectual property and to longer-lasting competitive advantages.

The Inspired InnovationsTM process is a wonderful team building experience and it enables even your weakest employees to become more productive. Team based solutions are almost always better than those of individuals. The result was much faster development cycles with a much higher success rate and many fewer mistakes. The process was also very

effective in optimizing business processes such as customer interactions. My Administrative Assistant used the process with her support team and managed to reduce her staff by 25% while we grew from 75 to 125 engineers, scientists and technicians. The Department Secretaries became more productive and enjoyed their positions more than before.

By the end of my tenure we were the clear technology leaders. Our materials, manufacturing processes and product technologies were preferred by customers around the world. We were able to secure premium pricing in the very competitive automotive industry. Competitors were forced to license our technologies and we also licensed several international materials suppliers to make some technologies available to other industries. This license income alone offset most of our original development costs. When I left, we were filing 2-3 new patents applications per week, had a portfolio of over 450 patents and were receiving 5-7 new patents per month.

During this time I received only three additional patents. I choose to seed ideas to my employees and let them get the rewards and recognition.

I then became Chief Technologist for Magna International in Canada. We grew the company from \$5.5B to \$15B in sales during my tenure. I taught the innovations process and experimental design techniques to development, marketing and upper management at the seventy-nine production divisions for which I was responsible. We gained technology leadership, quickly brought seventeen acquired companies up to our technology standards and quickly achieved the top ROS in our industry.

We won numerous additional international engineering awards and the process itself won an American Product Excellence Award.

Because of pay for performance clauses in my contracts, I was able to retire at age 51 and to start my own consulting firm.

I have taught my Inspired Innovations TM process at numerous corporate development organizations and have lectured at several top universities. Following a lecture at MIT, the faculty suggested that I

write a book. I did. It is a small book, but that is the point. The process is so simple to learn that my typical innovation consulting assignment consists of a few days preparation followed by 1-2 days on-site teaching the process and running a short demonstration. I am usually asked to facilitate their first internal innovation session. After that it is obvious to all involved that it offers significant value and it is so easy that I am no longer needed. In its first ten years over 650 patents and trademarks were generated by using this process.

The process works well with consumers, customers, internal interdisciplinary teams, suppliers and with teams of seniors or graduate students from a local university. The latter is particularly effective because these are bright, technically trained individuals with no knowledge of what is "impossible" according to your corporate history. Eliminating biases that exist in every organization can lead to amazing new approaches.

This last third of my career has been heavily involved with the development of nano-composite polymer systems, manufacturing processes and new products that take advantage of their unique combinations of mechanical properties. I have received eleven additional patents in this area and am recognized as a leading application development consultant in this technology. Products have continued to win international engineering awards but also have won awards such as Popular Science's Best New Product of the Year Award. I have taught a Nano-Composite Bootcamp at ~20 corporations as well as several times at the National Composite Center and at Canada's Composites Innovation Centre.

I would love to teach your organization to excel in product development.

My favorite experience is observing the look on a competitors face when we introduce a new product and they have no idea how to respond.

I will be happy to discuss some of the hundreds of products I have been privileged to develop.