



Remembering Bill Conway...

While Bill Conway had become less active in day-to-day operations at Conway Management over the past few years, his enthusiasm for eliminating waste, improving work, and treating people right have always guided us. As the following article, "It's the Squash!" illustrates, he helped thousands of organizations and millions of people over the years.

We will continue Bill's mission of helping leaders at every level to improve work and achieve sustainable gains in the ways he taught us. Please note that this will be the final newsletter sent in Bill's name, as future issues will be distributed by me. My email address is mj.king@conwaymgmt.com

Mary Jane Conway-King
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It's the Squash

by: Sheila Julien, Senior Associate

At the age of 52, the highly respected Chairman and CEO of Nashua Corporation might have been satisfied with the methods that had made him so successful at such a young age. He might have thought his 'squash', as he'd call the mindset, was just right. If he had, history would have been different. But the Fortune 500 company he led, like many in this country he loved, had begun to lose its competitiveness. He was determined to find out why and what to do about it. In 1979, Bill Conway was to become a major player in what US News & World Report would call one of the "nine hidden turning points in the history of the world,"¹ the application of Dr. W. Edwards Deming's management methods to revolutionize quality and productivity.

Bill Conway would spend the next several years learning everything he could from Dr. W Edwards Deming and figuring out how to apply it to western business. Going beyond traditional manufacturing, Bill's 'right way to manage' would be applicable to all types of work in all kinds of industries. He would spend the rest of his life helping hundreds of companies understand and apply the methods to identify and eliminate billions of dollars of waste of materials, time, capital, and revenue opportunities. And that's just so far.

Bill's impact on some of the largest corporations in the world and hundreds more mid-sized or small businesses has been profound and his passing has brought forth an outpouring of appreciation and recollection. This newsletter is dedicated to remembering Bill Conway and the most important lessons he taught.

Some History

*"In the late 1970's many US businesses, especially in automotive and electronics, witnessed a dramatic increase in competition from Japanese-based companies. In 1979 NBC television presented a white paper documentary, **If Japan Can Why Can't We?** At the time it aired, it was one of the lowest viewer ratings ever for this type of program. However within five years the program, producer and host, Lloyd Dobyns, told me 'it has become the most requested video in NBC television history.'*

Two featured testimonials help make this program a sensation: W. Edwards Deming and William E. Conway.

Ford Motor Company was so impressed with Dr. Deming, then 79, they signed him to a ten-year consulting contract. Ford executives also made a pilgrimage to Nashua, NH and taped an interview with Bill Conway. That taped interview, in



today's terms, 'went viral'. When Deming was asked 'where can we find statistical experts like you?', he answered 'the University of Tennessee.' The phone in my office at the University of Tennessee started to ring.

At that time, very few MBA programs taught statistics, but following World War II, the College of Commerce (later Business Administration) at the University of Tennessee began an instructional program in statistics. A talented new faculty member was a Texan named David Chambers. One of his closest friends was another statistician from Wyoming, Ed Deming. Following the NBC documentary *Deming and Chambers* began delivering seminars all over the United States.

In 1981 we conducted the first three-week 'statistical boot camp' seminar at the University. At the time I only knew Bill from the video tapes. Dr. Deming insisted that I contact Bill personally and invite the Nashua Corporation to send a team of managers to our program. A three person team from Nashua attended (and several more came afterward).

Ultimately seven of us would leave the university to form Tennessee Associates International. Bill Conway was our first financial investor and partner." — Tim Carpenter

From Dave Nelson, COO – Paper Group, Orange County Group LLC:

"Without a doubt, Bill was one of the most influential people helping to improve companies throughout our country and beyond, and in the process helped countless people to achieve richer, more rewarding, and more fulfilling lives. I'm certainly one of those people he helped. I shall be forever thankful that my boss was unable to attend a weeklong seminar at the University of Tennessee in 1988; having already paid for the seminar, he sent me in his place.

Bill was a speaker there at a morning session and what he said about the magnitude of the opportunity for improvement that exists in all companies was electrifying. I accepted his challenge not to 'do nothing' when I returned to work, but instead got busy collecting and analyzing data and then working to improve things. He started me on this path almost 25 years ago, and I've been proudly and happily pursuing his challenge ever since."

...and those important lessons

It's the Squash

Nothing is going to happen in 'the business' until something happens in 'the squash.' Until we stop using 'history as our chin bar' and open our eyes to the waste, we will get more of the same. Bill would say that "Budgets are just a bunch of numbers put together by a bunch of financial people based on a history of relatively poor performance." Once we see that the waste is built into the system that we manage, we start to change the squash. And once the squash is right, we can start to improve the system so that it produces significantly better results.

John Petrie remembers, "One of Bill's favorite expressions when working with leaders was 'You've got to get your squash right.' It's almost impossible to make game-changing improvements if you are stuck in the old way. He helped top people in such companies as Dow Chemical, Boeing, George Weston Bakeries, Entergy, the US Navy, Exxon get their squashes right, and make enormous improvements in their businesses.

Bill got everyone to challenge their assumptions about what made a business successful. He made sure those assumptions were surfaced so that they could be debated openly. He was concerned not about who was right, but about what was right."



Mel McNamara, Director of Quality Assurance, Staples, Inc: *"A valuable warning that I learned from Bill was that senior leadership often thinks that they know everything already so that an executive overview of this new way of leadership will suffice. I have relied on [The Quality Planning Process](#), which starts with educating top leaders and using initial projects to provide data and information to build the infrastructure based on feedback from those early projects and teams. In my experience, the organization may want a structured roll out but will appreciate this approach that incorporates the unique learning's of their business.*

Bill told me many times that only senior management could lead the type of behavior change required. In the NBC White Paper if Japan Can Why Can't We? Dr. Deming quotes Bill as saying 'If you cannot come, send nobody.' This quote was written in response to a vice president's request for an invitation to visit the Nashua Corporation to observe the work that Bill was doing. For years I did not agree with Bill's position on this issue but over the years it has been proven to be spot on every time."

Keep it Simple

Mike Gallimore: *"What Bill taught is very simple: 'Understand what is going on in your market. Use what is at hand first of all. Remember it is the external customer who determines value added. Waste is everywhere and managers must ensure that they don't create even more of it.'*

I realized that I have known, worked for and worked with Bill for just about a half of my life. He was, in essence, a man of great charm and energy who could explain simply what others would take hours of convoluted argument to achieve. What's more he could do that in just a few simple phrases. This is a rare talent and he had the personal attributes to make the recipient feel they worked it out themselves. We can all learn from this because that is how you get people to really understand and turn ideas into reality."

Mel McNamara recalls, *"Bill loved the KISS principle. 'Keep it simple' he would say, 'because it is simple.' [The Model](#) is elegant in its simplicity and yet covers every concept I have since learned about Lean Six Sigma and Improvement. Bill had a look when someone was over-complicating [The Right Way To Manage](#)©. 'It's common sense', he would say. That is not to say that that this simple approach was easy. 'It's simple to understand, but hard to do.' Inevitably a client would want to know how quickly they could roll this program out. I loved Bill's response and I especially loved the way he warned, 'THIS STUFF DOESN'T ROLL' or he would remark that 'if it were easy to do, everyone would have done it already!'"*

Doug Villiers was in charge of the maintenance crew at Norton when he first heard Bill speak. Doug, in turn, explained the new system of studying and improving work to his maintenance crew. They were able to schedule, study and plan the work to cut backlogs, stay on schedule for of their Preventive Maintenance (PM) Programs, and keep machines running. It made it a much more satisfying and productive place to work. Doug went on to positions of greater and greater responsibility, succeeding again and again with a simple formula: *"Bill told me to manage any department or division with the CI methodology I was taught and in reality that's exactly what I do. I have gone beyond any expectations I had for myself and my family. I have nothing but admiration, respect and gratitude for having the pleasure to know and meet Bill Conway". —Doug Villiers*

Ellen Kendall also remembered how Bill kept it simple: *"And as he taught and mentored others, he always pointed out that 'finding the waste and getting rid of it' was simple! It did not require extensive training or sophisticated tools. As I have seen organizations struggle to implement complicated and overwhelming structures, I am aware of how Bill had, indeed, the right idea!"*



Jim Copley: *"Bill's major contribution to the western business world was interpreting Dr. Deming's apparent statistical message into a straight-forward simple strategy focusing on work and the associated waste in the work; this waste often amounted to more than 20% of a company's sales."*

Go To Where The Work Is Done

Bill advocated a very straightforward approach to finding out where the waste is: go watch the work and ask the people doing the work what goes wrong.

Mel McNamara writes, *"My favorite memory of working with Bill is how genuinely interested he was with the actual work. He loved touring plants, factories or anywhere the work was being done. In particular I remember being in a shoe factory in China as he explained the Pareto Chart that he wanted the supervisor to create. He pulled out the folded piece of paper that he always had in his pocket and started to draw a check-sheet with the types of defects that he had observed. The workers were gathered around him intently listening, smiling and nodding as he told them that by this time tomorrow the supervisor would know what the top defect was for the day and could begin to work to eliminate it. I always wish I had taken a picture of that moment because the picture would have illustrated an idea that he taught, that the people doing the work knew where the problems, errors and complexities in the work were and that the simple charting techniques were communication devices to show leadership what to work on."*

Jim Copley: *"One of the powers of Bill's contributions is that he understood that all levels of employees could take part in the attack on waste once management decided that it was in their best interest to see that and then they lead the attack on the waste in the work; the final result being significant sales and profit increases."*

Bill learned this respect for the knowledge of the people close to the work very early in his career. Mike Gallimore remembers a story about Bill's first job experience as a young industrial engineer at Eastman Kodak. *"Bill was asked to look for improvements to a process called twin checking in the developing and printing of color negative film. He was advised to go and look at the process whereupon he began to think that this process was just about perfect. This made him wonder whether he had it in him to be an industrial engineer. He went back and found his boss, told him that the process was about perfect and there were no improvements to be made. His boss sent him back suggesting he talk to hourly workers. By asking the people close to the work, Bill very quickly got many ideas of what the problems were and how improvements to the process could be made."*

Two lessons for us all:

- 1. No matter how good it may look there is no such thing as a perfect process*
- 2. The people doing the work usually know where the troubles and problems are."*

Ask The Right Questions

"Whenever I traveled with Bill, he would always take some time at the end of a plant tour and explain where he saw the waste in the work. I could hear his voice in my head during the tour, "What in the process is so broken that the people have to stand around like that?" or "Why is all that STUFF sitting there?" and "Why isn't that equipment operating?" or "Did you see all of that inspection?" —Mel McNamara

The most powerful questions simply asked for the facts and data about the waste and then probed for the root causes. John Petrie remembers: *"Another lesson learned was how to think of the right question to ask, especially if*



no one had ever thought of that question before. Bill was outstanding at doing this. For example, in a large workshop for the senior leaders in a major mining company, Bill asked a very simple question, 'What is your yield on a ton of ore that you dig out of the ground?' In other words, do you know where the mineral that you dug up, ended up? How much produced value, how much was scrap?

The room was silent. No one in the room had ever looked at their mining and smelting operations that way before. The result was a number of projects to answer that question and produce millions of dollars in improvement."

Jim Copley shares: *"One of Dr. Deming's famous quotes is 'they (management at all levels) don't know what to do. They don't even know what questions to ask.' Way before the arrival of Dr. Deming, as long as I knew Bill, he clearly understood the power of the 'right question.' How many times would Bill come into my office and after a few niceties would begin with:*

- What are your customers telling you about your products and services?*
- Why aren't the costs of Product X going down?*
- What can I do to help the development of Product Y come to market?*
- Etc., etc., etc.*

Of course, the right questions lead to enlightenment and appropriate actions to solve problems and capitalize on opportunities."

Use & Understand Variation To Improve The System

John Petrie: *"I am an engineer by training and have an MBA with a major in statistics. I have used and taught statistical methods to hundreds if not thousands of people. I thought I understood variation as well as almost anyone, and certainly better than most. It wasn't until Bill taught me that the variation that really mattered was not the usual process variation you see, but the variation between what is and what could be. When I realized that, I looked at the world in an entirely different way — not as an engineer or consultant, but as a catalyst for change.*

The way that he taught me this blinding insight is also worth a few words. He did nothing to belittle me or make me feel badly for not grasping this concept sooner. This was one of his hallmarks — he did not put people down because they were not as advanced in their thinking as they needed to be and he granted everyone amnesty for past shortcomings. This behavior is so critical when you want people to identify waste — many would want to hide the waste, so that they could not be accused of running a sloppy operation."

But the statistics did not have to be difficult. *"Bill would say that straightforward observation is a good start and then, of course, enhance your knowledge with the use of the simple charting techniques. '90% of improvement can be made without the more complicated tools of Statistical Process Control.' I do not think that Bill felt that you need legions of Six Sigma experts, 'for those times when you need it, you can hire an expert' as Bill did at the recommendation of Dr. Deming while he was the CEO of Nashua Corp. But just having technical counsel is not enough; leadership needs to act on it. Bill would often quote Lloyd S. Nelson on this point; 'The central problem in management and leadership is the failure to understand the information in variation (and act on it).' To have statistical expertise without leadership was a waste."* **Mel McNamara**



Do The Right Thing

Bill would say there are only two things that matter: doing the right thing and doing it the right way. And if you are not doing the right thing, it doesn't matter how you do it. By this he meant focusing on the 'vital few' instead of the 'trivial many.' Quantifying the waste was a powerful approach to identifying what was really important in the business.

David Kellem, Vice President of Temple-Inland: *"To this day, you can still hear people quote Bill, 'Don't tell me what you are working on; tell me what you are doing'."*

Bill would constantly seek the right thing in every interaction. Bill taught his clients to do the right thing for their customers – and that is how he ran his own business. While working with a client, the main thing was to do to the right thing for the client. His employees really appreciated being able to focus all their attention on doing the best job possible for the client.

Mel McNamara recalls, *"Bill would say, 'Stick with the Golden Rule and you will avoid many of the traps that can get in the way of success. Remember though that to be able to treat people the way you would want to be treated in a situation, you have to have knowledge of the process. You probably would have done the same thing they did if you were in their shoes. Management controls the process, so understand it and improve it and don't blame the people because 90% of the problems are built into the system.'"*

Improve Constantly & Forever

One of Deming's 14 points is "Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs."

Bill was committed to constantly trying to make things better. Jody Ayers recalled visiting Bill at the assisted living facility after his health had begun to fail. His son, Jimmy, had just visited and walked Bill over to see an area of the facility that was under construction.

Jody asked,

"So what are you doing, Bill?"

"I'm working!" Bill exclaimed, as if surprised that she asked.

"Working? What do you mean 'working'?"

"16 hours a day!" he exclaimed with a twinkle. "I'm looking for the waste. It's everywhere! And I have to tell them about it."

Continuous improvement is constant and forever. The search never ends.

"Bill will be sorely missed by all who knew him, but his legacy will live on in the many people he taught through the years to always strive for better, to never settle for the status quo. He was such a remarkable teacher...and such a visionary for 'how things could be if everything were perfect.' I will remember him always." Jae-Ann Rock

¹Source: US News & World Report cover story, April 22, 1991 9. Dr. W. Edwards Deming (1900–1993), the American Einstein of Business, guides the Japanese post-war quality miracle and economic rebirth, starting in 1950.