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HAMMERING AWAY AT LEAN

Analysing how tools can support
a successful implementation

Organisations featured in this edition include:
Beth Israeli Deaconess Medical Center, Rane (Madras)
Limited, Harley-Davidson, TaeguTec, Cognizant,
TriHealth Heart Institute, Wabco, SCGM

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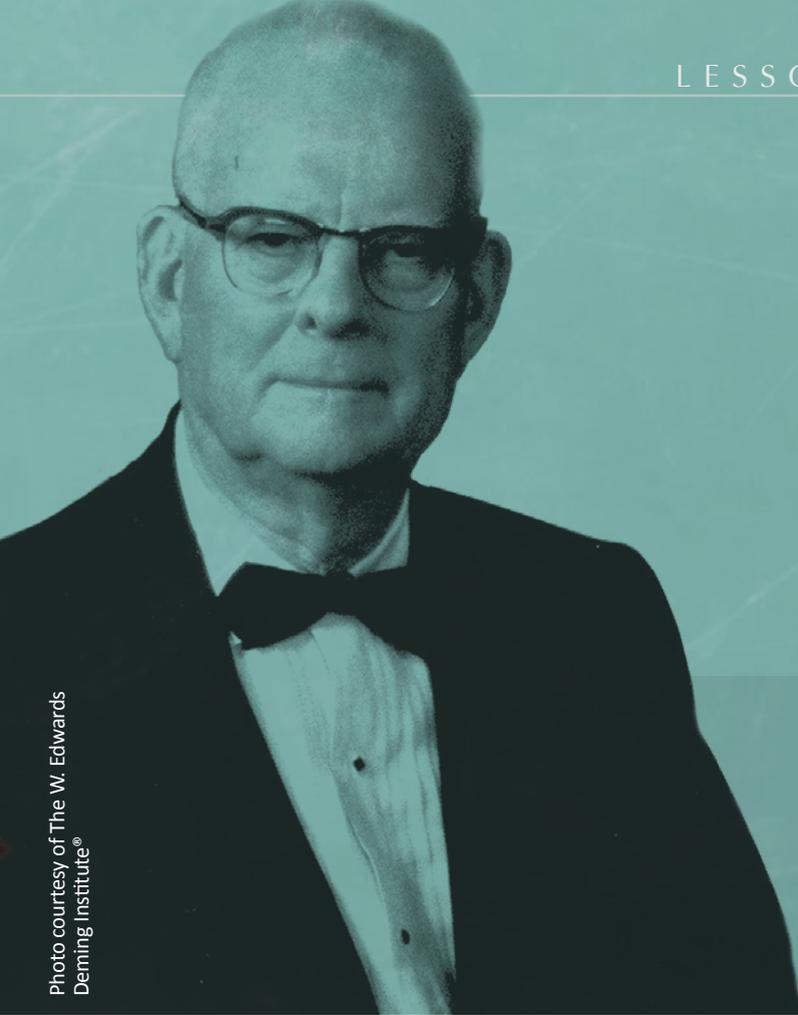


Photo courtesy of The W. Edwards Deming Institute®

First impressions



In the first of a series of articles on Dr William Edwards Deming's lessons, editorial board member *Bill Bellows* recalls the thinker's stimulating lectures and unique way to engage with students.

"There is not a day I don't think about what Dr. Deming meant to us. Deming is the core of our management," said Shoichiro Toyoda, Toyota's president between 1982 and 1992 and chairman between 1992 and 1999, at the 1991 Deming Prize Ceremonies.

One year earlier, in February 1990, Dr W. Edwards Deming fielded questions from the evening audience at Western Connecticut State University. This would be his third lecture in a day that began with a session with students, followed by one with faculty and staff of the business school. I attended all three lectures, in which he frequently referred to notes that later became his last book, *The New Economics*, published in 1993.

It was during these lectures that I was first introduced to his System of Profound Knowledge, the name he chose for his theory, yet deferred to each audience with a kind request - "If you have a better name, please help me," he would say. These sessions also included ample time for questions and answers from the many newcomers who joined me that day.

Approaching 90 years of age, Deming had no doubt heard many of them before. For me, in my first exposure, the questions and answers revealed both counter-intuitive perspectives and enticing possibilities. I sorted the questions and answers, like pieces to a greater whole, and began to arrange them in my mind. This is how my search for a pattern and a deeper perspective within the Deming message began.

“As with a whale or an organisation, what might appear to be fat or waste to one observer, could be an essential ingredient to the long-term survival of the system”

I recall one attendee in the evening audience seeking insight on the issue of staff cutting. His question went something like this: “Dr Deming, what do you think about the recent trend toward reducing the number of levels of management?” Although I was not a middle-level manager, I was captivated by the prospects of Deming’s answer, for it offered another piece to the puzzle. With little hesitation, Deming answered: “Why have more levels than you need?”

As for me, it was not the answer I had anticipated, nor the direction I had expected Deming to move. I was expecting a response with advice on how many levels of management were appropriate. Perhaps five. Perhaps three. Instead, Deming re-framed the issue with a question revealing a contextual appreciation of organisational interactions.

In time I could recognise that this was a standard reply from Deming, to answer a probing question with a probing question. But, I could not see it coming the first time I witnessed his Socratic style. More than I could have ever expected, his answer allowed me to further assemble the puzzle. My interpretation of Deming’s answer was that the number of levels of management would be dependent on the specifics of the organisation, not “one size fits all”. Given a specific situation or system, one would need an appropriate number of levels. More than this would be costly. Less than this would be costly. Trial-and-error often leads to an answer. Should the situation change, I might expect the solution to change as well. Instead of a “one size fits all” solution, this activity could be seen as managing the system, with its inherent interactions.

Now, consider what questions might have followed this question. Perhaps a series of questions, such as: “Dr Deming, what do you think about the recent trend toward reducing variation in our processes?”, or “Dr Deming, what do you think about the recent trend toward reducing the waste in our operations?”, or “Dr Deming, what do you think about the recent trend toward standardising our operations?”

I would anticipate Deming approaching each of these questions with an understanding of the nature of organisational dynamics. In each case, he would suggest the need for understanding the nature of the systemic behaviors. He would suggest the value of having neither more nor less than necessary. As with the title of his book, his proposal offers a *new economics*, one in which the focus is on the relationships between the elements of the system and not the elements taken separately.

As a real-life example Deming shared a story of how an employee’s travel costs were reduced by the travel department by requiring same day travel. But, the need for the employee to awake at 3am to prepare for a 6am flight from Chicago to New York left her too tired to make productive use of her day.

Instead of *reducing* costs, variation, or even waste, a more systemic approach would be to *manage* costs, variation and waste and provide the appropriate levels throughout the system. He would also remind us that what appears to be waste (hotel expenses) to one observer may not appear as such to another (the traveler). As with a whale or an organisation, what might appear to be fat or waste to one observer, could be an essential ingredient to the long-term survival of the system.

Likewise, instead of a widespread effort to standardise processes within an organisation, one might ask which processes should be standardised and which should be non-standard? For example, should language and software be standardised across an organisation, including its supplier base, as well as sub-tier suppliers? A coffee shop could have three or more sizes of coffee cups, yet have one lid size that fits each cup. A hospital could have uniforms for nurses that differ from those for doctors and staff members, thereby making it easier for patients and their families to identify the help they need. While there’s a place for standardisation, there is also a systemic limit to what is economically and operationally viable.

The degree to which the system “works together” can be enhanced with a better understanding of Deming’s theory, his System of Profound Knowledge. This consists of the four parts below, and their interrelationships:

1. Appreciation for a system
2. Knowledge about variation
3. Theory of knowledge
4. Psychology

In combining these bodies of knowledge, Deming’s theory offers a holistic appreciation of organisations that includes systems thinking, linked to variation management, linked to a theory of knowledge, further linked to an understanding of people. Twenty-three years later, I’m reminded every day of my first impressions of Dr Deming and how his theory for improving our understanding of life continues to transform countless lives.