

Performance, Excellence and the Trouble with Tools

Contributor: Dave Nave and Steve Dightman

Posted: 11/14/2011 12:00:00 AM EST

Business is a complicated endeavor, write contributors Dave Nave and Steve Dightman. Analytical tools (from Six Sigma, Lean, etc.) provide a perspective, highly dependent on selected parameters. But no single tool provides a complete picture of the reality. Here's what you need to know.

Performance excellence occupies the attention of many organizations. Discussions in those organizations focus on how to accomplish the change from the current performance condition to the desired performance condition. Inevitable discussions fixate on tool selection, frequently degenerating into arguments about which tool to use.

Though tool selection is important, the trap is believing that all an organization has to do is select the right tool and all will be well. Unfortunately, tools are often applied to situations for which they were never intended. At other times, the proper use of the tool is not well-understood, and at still other times, the tool users do not have what Dr. Deming called 'intimate knowledge' of the data being examined.

The Difference Between Analysis Tools & Managing Tools

Let's start by saying that we have found that dividing tools into two categories is very helpful in tool selection.

Those categories are:

- Tools used to analyze, to make assessments
- Tools used to manage.

Of course, one often uses analysis before making a management decision, but managing to the analysis (using only the information the tools provide us) is dangerous. Here is why: analysis and managing are quite different and move along different pathways:

Analysis is a *deconstruction* activity:

- a) Determine elements of a situation
- b) Critically examine those elements to identify causes or key factors, and
- c) Interpret results

Managing, on the other hand, is a *synthesizing* activity, consisting of combining people and material resources towards obtaining the purpose of the organization.

To support our theory we turn to Dave Snowden and Alfred Korzybski. In his Cynefin (pronounced 'Ka-nev-in') model, Snowden describes that businesses live in a continuum of stable-through-chaotic states, and he reasons businesses often take *ineffective action because the applied tools, and business management philosophy, do not fit the current-reality-state.*

Korzybski theorized that we operate with 'maps' in our heads, and that we are constantly inserting distortions, deletions and generalizations, further separating us from reality. Hence, we see the importance and power of proper tool selection and use.

Essentially, all models are wrong, some are useful. - George E. P. Box

Tools as Reality States, Maps and Models

Models are aids to thought used to understand and provide new insights into a given situation. Each model is a unique version of reality, created using factors chosen to be important. Models never totally represent the whole of reality; of course, they only provide a limited aspect or perspective. To paraphrase Dr. Deming 'Change the factors, get different results.'

Consider this simple model: a road map. A road map is a tool used to help visualize something that cannot be directly observed. Yet, a road map does not show every pothole, it only produces a guide about what roads are available.

Using a tool, a model, for what it was not intentioned may mean we experience blissfully smooth travel –until a big pothole causes us to break an axel of our business.

The Case for Deming's 'Intimate Knowledge'

Many tools are used to help organize data into information. In such situations tools are a focusing agent because from the ambiguous environment of data overload, tools bring clarity by exposing something not intuitively obvious or directly observed.

Dr. Deming mentioned that to be useful one must have 'intimate knowledge' of the processes that generate data. When combining intimate knowledge of the process with the operation of the proper tool, then rational predictions are possible. Another way of saying this is that meaning and purpose are essential elements in choosing and using tools, and the user must understand the information and data as well as the tool. This applies to virtually every kind of performance situation, be it related to logistics, human resource issues, production throughput, R & D, training, operations, customer service, sales, marketing, waste reduction, procurement, etc.

Business tools and models within each of the above elements of an organization carry with them embedded theories and assumptions. It is the skill of the tool operator in selecting and adjusting the tools to the specific context and application that yield the best results.

The Value of a Tool, its Use, and Meaning

The potential for great disaster ripens when misconceptions are made in the underlying beliefs about the value of the tool, its proper use, and the meaning that can be derived from what the tool reveals. A lack of clarity, even with the best of intentions, may unwittingly reinforce existing undesirable behaviors, or worse, create new problems. In some cases, though, it is as simple as this: the underlying beliefs are faulty, and thus tool selection will be faulty.

For example, the managers at a company believed they could cause customer service representatives (CSRs) to convince customers who called to cancel their service with

the company –not to do so. The tool chosen by management to drive this CSR behavior was pay-for-performance in which customer service representatives were compensated in relation to the number of customers they could retain when customers called to cancel service.

This use of pay-for-performance based on the metrics of service cancellations was the wrong tool –both for analysis and for management (synthesis). Why? Because neither pay-for-performance nor the metrics alone provides us with the knowledge of what causes customers to want to discontinue service with the company.

Many factors are involved in regard to a customer request to discontinue service. CSRs have little or no influence on many of these situations. Yet, because their income was dependant on the non-cancel metrics, employees devised several ways to avoid service cancellations.

Initially managers were delighted with their pay-for-performance solutions because the company saw the metrics improve almost immediately. It seemed that their underlying belief in incentivizing (and punishing) the CSRs could cause the CSRs to overcome the reasons why customers were cancelling services. The managers believed the CSRs could somehow prevent service cancelations –if only they would try harder. After several months, however, the company saw a much higher number of customers complaining that they were still receiving bills for services they had cancelled.

What might have been a better tool or approach? First, consider that Dr. Deming listed pay-for-performance as one of the “Forces of Destruction,” and he pointed out that such schemes are unlikely to contribute to the deeper understanding necessary to make significant improvements. In a very practical sense, if we remove pay-for-performance from our tool box we are more likely to move towards more useful tools. Thus, getting rid of the pay-for-performance system would be a good first step because doing so would make it easier and more effective for CSRs to actually hear –and probe for-- the voice of the customer. Perhaps a root cause analysis, a Pareto chart, knowledge of the reasons customers signed up for the service initially, even a survey, and other analytical tools would lead to a better plan of action (via another tool: Plan-Do-Study-Act experiments).

A Few Pitfalls

One pitfall seems always to be lurking because in traditional management courses we are educated to manage organizational components for greatest individual efficiency and often separately. This usually results in managers overlooking interactions of the parts and behavior as a whole. Unfortunately many times efficient parts do not work well together, nor contribute to the success of the whole.

Dr. Deming talked extensively about interactions of components in his ‘System of Profound Knowledge’ (SoPK), including how the system influences behavior, how statistical thinking influences the understanding of a system, and much more. He stressed how the performance of the whole is NOT the sum of its parts. Yet, most tools are designed to focus on a specific ‘part’, rather than on the whole, and thus if we lack intimate knowledge of how the system works, we are likely to create disaster.

Entrained thinking (aka: stuck in one’s own models and beliefs) is another pitfall which limits our future effectiveness in choosing tools to help us make assessments and to manage. As an illustration, the tools used to analyze labor cost can result in the fixation

that labor cost is a paramount consideration for profitability. While direct labor is only a small expense in most organizations, fixating on labor cost frequently sacrifices responsiveness, logistics, reliability, and environmental and human factors.

Business is a complicated endeavor. Tools provide a perspective, highly dependent on selected parameters. No single tool provides a complete picture of the reality. There is always more to a tool than the specific application. As we discuss the tools to improve performance, we owe it to ourselves and our organizations to use both excellent analysis and insightful management practices. Deming and others help us do that.

Authors' Note: Please send an email to SteveDightman@kendra.com or Dave@DaveNave.com if you would like more information –or to start a discussion-- on Deming, Snowden, and Korzybski.

Editor's Note: The columns published in THE DEMING FILES have been written under the Editorial Guidelines set by The W. Edwards Deming Institute. The Institute views these columns as opportunities to enhance, extend, and illustrate Dr. Deming's theories. The authors have knowledge of Dr. Deming's body of work, and the content of each column is the expression of each author's interpretation of the subject matter.

<http://www.processexcellencenetwork.com/organizational-strategies-for-innovation-continuu/columns/performance-excellence-and-the-trouble-with-tools/>

Process Excellence Network, a division of IQPC 2011 All rights reserved.