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Driving decisions with data, Part 2

By Dr. Joe Perez

In last month's edition containing part one of this article, we started answering the question of whether data should be driving our decision-making in business and what steps should be taken to get from being in data denial to being data-driven.^[1] I suggested five such steps, covering the first two (**dominance** and **relevance**) in part one. We have already learned to both "look" and "link" when it comes to being data-driven through the steps of dominance and relevance. Let's pick up where we left off and begin with the third step.

Step three: significance (with the key verb of "listen")

So far in this data-driven journey, you have prioritized your objectives and presented relevant data; now, it's time to start drawing conclusions from that data. That is, after you've **looked** and **linked**, start **listening** for the significance. There must be some meaning to what you have seen. The data elements revealed up to this point are the ones that have the highest priority and relate to your organization's mission, vision, and goals. Therefore, the task is to start searching for significant patterns, trends, and/or nuances that indicate the general direction. In other words, you need to listen to what the data tells you, whether it's an upward or downward trend, a statistical fluctuation, a correlation, or nothing.

Finding patterns to draw conclusions is nothing new. As a matter of fact, many of us may have been doing that since we were children. For example, suppose your fifth-grade math teacher writes a series of numbers on the board: 42, 36, 31, 27, and 24, then asks you to determine what the following two numbers will be. You think for a minute, and then you write 22 and 21 because you figured out the pattern: Each number was being subtracted by one number less than the one before it, starting with 6, then 5, 4, and 3 (that is, $42-6=36$, $36-5=31$, and so forth).

We continue to use pattern recognition throughout life, even though we may not see it as such. And if we are to become data-driven in our decision-making, this listening and drawing of conclusions should be honed by questioning patterns (that is, are they linear, exponential, stationary, damped, seasonal, random, cyclical, etc.).

Charles Wheelan, a *New York Times* best-selling author and public-policy professor at Dartmouth College, cited a practical yet extraordinary example of this. He wrote an article about demystifying data around a police department in Santa Cruz, California, that claimed they had solved a crime before it happened.^[2] No, they were not channeling their inner Tom Cruise from the *Minority Report* movie. It was just their process of applying skills with data in recognizing patterns. By carefully analyzing mountains of crime data and determining when and where crimes were happening most often, they dispatched more officers to those locations. One of those locations was a parking garage where there had been quite a few car break-ins. What comes next will stretch one's imagination. While on patrol, the officers spotted a couple of suspicious-looking women loitering near a

car. As it turned out, one of those women had an outstanding warrant, and the other had drugs on her, so the officers arrested them both before they could break into that car!

Crystal ball? Genius? Nostradamus? No, none of the above—it was simply a matter of dedicated professionals using data and listening to spot the patterns and deploy resources to places where they would likely do the most good. One of the best ways to listen is to ask questions. And as Wheelan put it, “Interesting answers are out there. People who care about those answers just need to go looking for them, maybe with a little bit of prodding.”

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