



Innovating Innovation

In 1968 at the Summer Olympic Games, held in Mexico City, the world was introduced to a high jumper from the United States named Dick Fosbury. During the high jump finals, Fosbury cleared 7 ft, 4.25 in., on his third attempt to win gold and, at the same time, set an American record for the high jump. Fosbury unknowingly did much more than that—he changed the future of how high-jumpers would fly over the bar.

Before Fosbury, the standard techniques high-jumpers used were to hurl themselves over the bar face-down or perform a scissor-type kick to clear each leg over the bar. After seeing Fosbury at the 1968 Olympics, high-jumpers began approaching the bar with a side-angle run and flying over it with their back facing the bar. The then-innovative technique was dubbed the Fosbury Flop.

Interestingly, Fosbury ran into a great deal of resistance as he was inventing his innovative jumping style. He began developing the technique while in high school, where his coaches pressured him to conform to the traditional approaches; this pressure lasted until he started to win with his “flop.” Similarly, his college coaches pushed the traditional techniques and, despite the evidence, so did his Olympic coaches.

We all know the end of the story—the Fosbury Flop became the most commonly used high jump technique. The important lesson for us is that innovation (even in sports) takes time to be accepted, and a key to acceptance is communicating the value to the masses. After several years of innovating, Fosbury was fortunate to communicate his unconventional technique over the course of a few days to the entire world as, at that moment, all eyes were fixed on the Olympics.

If Fosbury was repeatedly able to win with his unconventional technique at the high school and college levels, why, then, didn't others adopt the winning technique before the Olympics?

The process of adopting innovation is often explained by the law of diffusion. This theory describes how new ideas are sequentially adopted in phases by society and, if successful, eventually become mainstream. The first phase includes society's risk-takers—inventors and earlier adopters—who, like Fosbury, are the part of society willing to try new things. This group makes up about 16% of the population. An innovation, however, does not take off until it is adopted by the mainstream of society, which the theory refers to as the early and late majorities. These two critical groups make up 68% of society; without their acceptance, innovation fails. The final 16% are referred to as the laggards, and they may never adopt the innovation.

According to the law of diffusion, the key to success for any innovation, especially those that are commercially based, is to successfully bridge the gap between the inventors/early adopters (i.e., the first 16%) and the early and late majorities (i.e., the middle 68%). The two keys to bridging this gap, as Fosbury demonstrated, are (1) investing time to build confidence in the innovation and (2) successfully communicating the benefits of the innovation—the more compelling the communication, the shorter the time to bridging the gap.

The water sector is commonly viewed as being part of the late majority, meaning we are slow and cautious to adopt innovation. In many ways, this slow-and-cautious culture can be traced to the water sector's significant mission of protecting public health by providing safe drinking water and safeguarding the environment when returning water to it. While this mission does not leave much room for risk-taking, it seems we are more open to innovative solutions today than ever before.

Still, it would be great to shorten the time it takes for our industry to build confidence in an innovation, essentially reducing the time gap between the early adopters and majority users. While rapid adoption is hard—like it was for Fosbury in high school and college—strategies are emerging to help accelerate the acceptance of innovation, and the number of venues for communicating the value of innovation is growing. This should help.

The strategic advantage that may help the water sector the most in successfully accelerating the adoption of innovation is the willingness of its constituents to work together. Water utilities have a long history of freely sharing information with each other; when information is shared, innovation happens faster. In fact, this strategic quality is the principle that first brought AWWA's founders together in 1881. It may seem ironic that one of the secrets to fostering innovation is the simple, tried-and-true principle of sharing information. This secret, in combination with the increasing number of communication venues, creates an Olympic-type opportunity to shorten the time to adoption and allow the water sector to raise the bar and soar over it.

<https://doi.org/10.1002/awwa.1132>

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