Richard Larson

Professor of Data, Systems, and Society, MIT

Richard Larson still remembers the line that broke him. It was 1985, and the MIT professor had stopped by Sears to pick out a bike for his 6-year-old son. After choosing the model and paying for it, he made his way to the merchandise-pickup area, handed his receipt to a clerk, and waited. “Ten, 20, 25 people came along after me, gave in their receipts, and then walked off with their lamps, waffle irons, and quilts as I just sat there,” Larson recalls. “I was furious.” By the time the clerk called his name more than half an hour later, the operations researcher and systems engineer had made two resolutions: to return the bike and to never shop at that Sears again. (He stuck to both.)


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Richard Larson.
Adam Cruft

Weeks later, Larson had a sudden insight: It wasn't the wait that had upset him. It was how people who arrived after him had beat him to the exit—and that he had not expected a delay. That was the genesis of his seminal 1987 paper, "The Psychology of Queuing and Social Justice," which highlighted the importance of fairness and feedback to a person's waiting experiences.

Today, Larson remains one of the world's foremost experts on lines. An engineer by training, he began his career solving queuing problems with statistical probabilities and flow-balancing equations. Over 45 years, his work has ranged from helping the New York City Police Department reduce its 911 emergency-call wait times to inventing the Queue Inference Engine, a mathematical method for determining the length of a line and how long people have to wait in it when data isn't readily available.

More recently, Larson has focused on using customer engagement and information to shape people's perceptions in line. He points to Disneyland and Disney World as places that are doing it right (though he doesn't work with them). Because the theme parks purposely overestimate wait times, a family can stand in line for 40 minutes, Larson says, thinking they were going to wait for an hour, then get on a four-minute ride and be completely happy. "That's what happens if you manage people's expectations such that you can exceed them," he says. "I wish airline pilots understood this better when you're on a

ground hold.”

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