Side Effects of Technology

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For example, in the year 1900, automotive companies produced 4,200 cars, of which 28 percent were powered by electric motors. While electric cars could run efficiently at about 30 MPH, gasoline-powered cars could reach higher speeds and travel longer distances.

In 1908, Henry Ford began mass production of the Model T with a gasoline engine. The decision prompted Thomas Edison to stop the development of a longer-lasting battery for electric cars.

During the last century, automotive engineers designed more than 10,000 automobile innovations, such as the electric starter, the automatic transmission, the car radio, the electric turn signal, the electric window, power steering, cruise control, cassette and then CD players, ABS brakes, GPSs, heated seats, massaging seats, solar-powered cooling fans, and more.

Then there are related innovations such as traffic lights, speed bumps, detours, radar detectors, speed traps, traffic courts, and more. Today's cars are designed to drive more than 120 MPH, but traffic conditions slow us to an average speed of about 30 MPH. It is ironic that after more than a century of innovation, we've only doubled the speed of a horse. But slow-moving traffic isn't the only side effect of technology.

Information technology creates different side effects. We've accelerated the speed of information and increased the volume of information, and every day we master a smaller fraction of what there is to know. Surveys show that with all the computing power at our fingertips, neither business productivity nor customer satisfaction has increased. That's because information is moving quickly and growing exponentially. Consequently, our days vanish in a blur of emails, conference calls, and insane travel schedules. Information technology tends to subdivide our time, which dilutes our overall focus and often prevents us from thinking harder and deeper.

Technology allows us to communicate with a lot more people a lot faster. The side effects are that we miscommunicate more often, and we often miss the chance to communicate with honesty.

Managing complexity is one of the toughest leadership challenges. The solution is not to blindly eliminate complexity but to embrace it where it drives up revenues and value. We need to eliminate it when it just adds to waste. Today we need an intense curiosity about how to win without allowing complexity to strangle our humanity or sabotage our hard-earned progress.