

do you think he put technology? First? No. Second? No. Third? Nope. Fourth? Not even. Fifth? Sorry, but no. "The primary factors," said Ken Iverson, "were the consistency of the company, and our ability to project its philosophies throughout the whole organization, enabled by our lack of layers and bureaucracy."²³

Stop and think about that for a moment. Here we have a consummate case study of upending the old order with new technology, and the CEO who made it happen doesn't even list technology in the top five factors in the shift from good to great.

This same pattern continued throughout the Nucor interviews. Of the seven key executives and board members that we interviewed, only one picked technology as the number one factor in the shift, and most focused on other factors. A few executives did talk about Nucor's big bets on technology somewhere in the interview, but they emphasized other factors even more—getting people with a farmer work ethic on the bus, getting the right people in key management positions, the simple structure and lack of bureaucracy, the relentless performance culture that increases profit per ton of finished steel. Technology was part of the Nucor equation, but a secondary part. One Nucor executive summed up, "Twenty percent of our success is the new technology that we embrace . . . [but] eighty percent of our success is in the culture of our company."²⁴

Indeed, you could have given the exact same technology at the exact same time to any number of companies with the exact same resources as Nucor—and even still, they would have failed to deliver Nucor's results. Like the Daytona 500, the primary variable in winning is not the car, but the driver and his team. Not that the car is unimportant, but it is secondary.

Mediocrity results first and foremost from management failure, not technological failure. Bethlehem Steel's difficulties had less to do with the mini-mill technology and more to do with its history of adversarial labor relations, which ultimately had its roots in unenlightened and ineffective management. Bethlehem had already begun its long slide before Nucor and the other mini-mills had taken significant market share.²⁵ In fact, by the time Nucor made its technological breakthrough with continuous thin slab casting in 1986, Bethlehem had already lost more than 80 percent of its value relative to the market. This is not to say that technology played no role in Bethlehem's demise; technology *did* play a role, and ultimately a significant one. But technology's role was as an *accelerator* of

Bethlehem's demise, *not* the cause of it. Again, it's the same principle at work—technology as an accelerator, not a cause—only in this comparison case it is operating in reverse.

BETHLEHEM STEEL'S LONG DECLINE

Ratio of Cumulative Stock Returns to General Market,
June 1966 – December 2000



Indeed, when we examined the comparison companies, we did not find a single example of a comparison company's demise coming primarily from a technology torpedo that blew it out of the water. R. J. Reynolds lost its position as the number one tobacco company in the world not because of technology, but because RJR management thrashed about with undisciplined diversification and, later, went on a "let's make management rich at the expense of the company" buyout binge. A&P fell from the second-largest company in America to irrelevance not because it lagged behind Kroger in scanning technology, but because it lacked the discipline to confront the brutal facts of reality about the changing nature of grocery stores.

The evidence from our study does not support the idea that technological change plays the principal role in the decline of once-great companies (or the perpetual mediocrity of others). Certainly, technology is important—you can't remain a laggard and hope to be great. But technology by itself is never a primary cause of either greatness or decline.