During the decade of 1990, prominent American technology firms built global leadership positions combining innovative technology with cut-throat approaches to assessing technology talent. Paraphrasing former Intel Corp. CEO Andy Groves’ book Only the Paranoid Survive, only the most skilled workers survived the annual performance review.

As the United States Citizenship and Immigration Services agency begins today to assign, by lottery, H-1B visas to 65,000 non-immigrant foreign nationals for fiscal year 2016, the operative word in my opening paragraph is actually not a word.

It’s a number: 1-9-9-0.

As in the year the first 794 H-1B visas were issued. And the year that the New Commission on the Skills in the American Workforce released a provocative report, America’s Choice: High Skills or Low Wages, that questioned the skills of U.S. workers which were “largely modeled after the system of manufacture made famous by Henry Ford in the early 20th century.”

But by 1990, it was too late. American business leaders and politicians missed the 1945 sea change where, for the first time, the percentage of service jobs in America was greater than manufacturing/agricultural jobs. Our public schools, as reviewed in a 1945 report entitled Science, The Endless Frontier, also missed the memo.

Welcome to the H-1B visa era. An era predicated on the notion if we can’t teach science and math skills in our schools, we will just import skills.

While the H-1B is now a highly contentious issue, back in the 1990s, as companies scrambled to remediate software code to ward off Y2K disasters, the H-1B visa was widely embraced. In 2001, 195,000 visas were granted. Employers liked what they saw in H-1B visa holders: a strong work ethic coupled with tech smarts. The fact they were relatively affordable, well, that was icing on the workforce cake. American workers, on the other had, despised the H-1B program and resented insensitive “training” programs where U.S. workers trained the H-1B workers to do their jobs. Some were later terminated. For them, the H-1B visa was a cold-hearted way to lower business costs.

It has been my observation that only a minority of displaced workers took a long, hard look into the employment mirror and questioned whether their skill set was up-to-date, certified or cost competitive. In my years writing about the H-1B visa for CIO Magazine, tech worker critics of the H-1B visa always had a scapegoat: greedy employers, transient foreign workers, age discrimination, uninformed politicians. Never was it their fault.

But enough with looking back. With the median age of an information technology worker in America approaching 53 years old in 2015, how does the skill set of the future American worker stack up against tech workers around the world?

The short answer: not well.
The Organization for Economic Co-Operation and Development fielded a global test in 2013 that measured the math and science skills of individuals age 16-65. A year later ETS, the group that administers the SAT test, reviewed test results examining scores for U.S. millennials, the supposedly tech-savvy individuals age 16-34 who form the core of America’s future workforce. Here’s what they discovered: American millennials performed horribly. “No matter how you sliced the data – by class, by race, by education – young Americans were laggards compared to their international peers,” The Washington Post wrote. “In every subject, U.S. millennials ranked at the bottom or very close to it.”

Ouch! No, make that a double-ouch when you factor in later this year the millennial generation of Americans will surpass retiring Baby Boomers as the largest population segment in the United States.

After you read the ETS review and factor in that five million jobs are ”open” in America and 40% of Fortune 500 firms were founded by immigrants, you wonder why are we even having a debate about the H-1B visa program.

For me it is clear. The American economy needs more, not fewer, skilled technology workers. Reinventing public education to teach the digital skills needed in the workforce is job #1 for the United States. This is America’s energy-independence fight for skills. Until that job is completed, and it will take at least 20-years to do that, Congress needs to act.

Here’s how. By this time next week, the 65,000 H-1B visas will be ”sold out.” Do the math. America has a classic supply and demand problem. Here’s an idea: for fiscal year 2017 Congress should lift the H-1B cap entirely. See where demand goes. Then hit the reset button – for more, or fewer, H-1B visas – for FY 2018. Make it a market-driven policy decision. Not a political one.

The current H-1B program pleases no one. Vivek Wadhwa, a Fellow at Stanford University who follows immigration issues, says unreasonable visa policies could lead to a “reverse brain-drain” where talented non-immigrant foreign nationals choose home, rather than the United States, to start their companies.

And create new jobs.

With baseball season starting next week, that is one home run the American tech industry is not rooting for.

Gary J. Beach is former publisher of CIO Magazine and author of “The U.S. Technology Skills Gap”. Reach him at garybeachcio@gmail.com or follow him on Twitter @gbeachcio.