

# Tech and Geopolitical Cycles

by George Friedman - January 24, 2023

There have been seemingly endless reports of massive layoffs in the tech industry. Partly they are due to economic circumstances, of course, but overlooked in the reports is the inherent maturity of the tech industry. By maturity, I mean two things: The rate of genuine innovation has broadly declined, and the industry seems to have prioritized the need to productize over the need to discover new technological possibilities.

At a certain point, the imagining of new products built around the microchip, whose importance cannot be overstated, became difficult. More precisely, the appetites of the market became increasingly satiated. New versions of older products did not present radically desirable capabilities but rather minor enhancements to very useful products. Sometimes, change was introduced for change's sake. Tech was reaching the technical limit of amazing people and raising in them the urgency of acquiring new versions. Tech wasn't obsolete, but neither was it extraordinary.

This cycle is baked into industrial capitalism. The automobile was built around the internal combustion engine, and its mass production fundamentally changed the world. Patterns of land use, the possibilities for locating homes, the very culture of civilization and the meaning of distance were transformed. The internal combustion engine changed production and distribution of goods and human relations. It also became a symbol of social status. Different brands, essentially built on the same technology, assumed and sometimes defined a new identity.

The auto industry learned how to market, and how to make the public desire a new car. The new version often boasted greater improvements. Automatic transmissions, power breaks, windshield wipers and so all drove business, and the turnover of cars was stunning. The annual display of new models became a significant event, even as trading in your year-old car for a new one became difficult.

In the 1960s, it became increasingly difficult to think of innovations that would compel customers to trade in completely usable cars for something new. Social standing as a fringe benefit from the car started to decline. By the 1970s, the auto industry was financially staggering, and what were once jobs guaranteed for life turned into a series of layoffs – this just a mere 50 years after the car changed the world. Desperate to innovate, makers designed cars that could fly, or sold cars that

could also be boats. But all that could be sold had modest changes in a necessary commodity.

The problem was that the automobile had reached a limit, not of innovation but of the speed of innovation that drove demand. It became a utility, not the fulfillment of a dream or a signal of sophistication. This is what is happening in the tech industry today. Recently, I broke my cellphone and went to buy a new one. The new one offered novelties I didn't want, let alone understand. I was once obsessed with computing. Now, as prices rise and the ease of use falls, I long for my Blackberry. That's not to say the innovations aren't real; it's just that now, the products mostly just come in different colors, sold by a salesman as my old Plymouth once was. The innovation has created a level of complexity that has dampened the motivation to replace a phone.

The stories of the automobile and the cellphone are presaged by the extraordinary arrival of electricity in the late 19th century, which dramatically changed the human experience. It was seen at first as not important. Then it was seen as the end of history. Then its very success made it routine and banal. I could speak of the steam engine and railroad, both of which were historical pivots that never left us but never returned to the romance they had been either. Each was part of the creation of a cycle of geopolitics. As I have said elsewhere, the time is coming for the high-tech economy (what I prefer to call the microchip economy) to be replaced by other things, at which point my children's grandchildren will chuckle at the notion that the PC was cutting-edge.

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