

Excerpt from <https://blog.irvingwb.com/blog/2012/01/the-legend-of-apple-and-xerox-parc-and-the-truth-about-innovation.html>

See Thompson's email

In his article, Gladwell discusses a related PARC innovation - the laser printer. The [laser printer](#) was invented in the late 1960s in Xerox's Webster research center outside Rochester, New York, by optical engineer [Gary Starkweather](#). Starkweather told Gladwell that his boss at Xerox thought that laser printers were the most brain-dead idea he had ever heard because lasers were too expensive. Starkweather was told to find something else to work on, a request that he ignored as he continued to refine his invention, now hidden in a back room behind a black curtain. When he learned that Xerox was opening a research center in Palo Alto, three thousand miles away from its New York headquarters, he demanded a transfer or else he would quit. His wish was granted and he transferred to PARC in 1971.

The PARC team really liked Starkweather's laser printer because they needed a way to print, on a regular sheet of paper, - the graphical images on the screens of their bitmap displays. This is precisely what laser printers did uniquely well. It was a marriage made in heaven. The strong support he received in the highly creative atmosphere of PARC enabled Starkweather to get a prototype up and running within ten months of his arrival. He was thus able to finally prove the superior value of his invention. Xerox eventually embraced laser printing as the foundation of their successful computer printer business.

"The reason Xerox invented the laser printer, in other words, is that it invented the personal computer," writes Gladwell. "Without the big idea, it would never have seen the value of the small idea. If you consider innovation to be efficient and ideas precious, that is a tragedy: you give the crown jewels away to Steve Jobs, and all you're left with is a printer. But in the real, messy world of creativity, giving away the thing you don't really understand for the thing that you do is an inevitable tradeoff." Xerox did not come out all that badly in this tradeoff. "Gary Starkweather's laser printer made billions for Xerox. It paid for every other single project at Xerox PARC, many times over."

To achieve marketplace success, disruptive innovations need to be nurtured in the proper environment. Xerox was eventually able to embrace laser printers and make them a success in the marketplace because they nicely fit into a business they understood well, - copiers, printing and document management. But, in the late 1970s Xerox was no longer in the computer business, having [exited that market](#) in 1975. This made it very difficult for the company to appreciate the business potential of the Alto and related computer technologies being developed at PARC.