

Devina Mehra: Want to invest in technologies of the future? Good luck with that

Devina Mehra | 29 January 2025



Even if a technology succeeds, we cannot know in advance which company in that field will succeed and therefore make for a good investment. (Reuters)

SUMMARY

Most 'new' technologies fail, even though winning picks may eventually come to be seen as obvious in hindsight. Betting on winners ahead of time is a risky game of guess work.

We have all read the thrilling story of the Wright brothers' flight—the first time humans could fly in a powered, heavier-than-air machine. And they did it not just once, but four times in a single day, the last flight lasting almost a minute. They had invited the media to the event, so you would think that their stupendous achievement would have been splashed on the front pages of all newspapers.

But what really happened? Only one paper carried the story. The rest were sceptical, asking whether it had really happened, arguing that it was too short to be meaningful, etc. This went on for a long time. Surprised? Don't be. This is what happens with most 'new' technologies. Even the most earth-shaking ones often spend years, even decades, in the wilderness before becoming the 'overnight' successes we know of.

I used to meet renewable energy companies in India in the mid-90s. Reva, an Indian electric car, was launched nearly 25 years ago. But we think of electric vehicles and renewable energy as recent phenomena. And this is from the list of technologies that made it. The list of those that did not or were hyped to the skies but were ho-hum successes at best is very long.

As Eric J. Savitz, who wrote the Tech Trader column for Barron's for 40 years, wrote in his farewell piece in July: "Most of the time, the next great thing just isn't that great, although it always makes for fantastic copy... Let us raise a glass to 3-D televisions, the metaverse, virtual and augmented reality, 3-D printing, personal

drones, cryptocurrency, blockchains, NFTs, Web3, fake meat, legal marijuana, Segways, Quibi, and Napster... Let's all fondly remember Google+, Google Glass, Netflix Qwikster, Apple Ping, Apple cars, Apple Pippin, Apple Newton, Apple eWorld, HP iPods, Windows Mobile, Microsoft Zune, Clippy, and Microsoft Bob... Let's spend a moment recalling the rise and fall of flip camcorders, MoviePass, SecondLife, Hyperloop, WeWork, Jawbone, Webvan, Juicero, nanotech, superconductors, Theranos, Solyndra, SPACs, and direct stock listings... Turns out, it isn't easy to change the world."

Many in this list of technologies or products seen as promising like Apple cars, Google Glass and 3D televisions were launched with great fanfare at glitzy events, but came to nothing; others may have had limited success, like Segway or fake meat. And then there are some that made it big, like Google, WhatsApp or YouTube.

From an investment point of view, I am often asked about the new technologies I want to bet on and how portfolios should be structured for participation in "exciting emerging technologies."

The truth, as the long list above shows, is that many promising technologies never fulfil their supposed potential and fall by the wayside. The failure rate is extremely high.

Second, even technologies that succeeded often took a very long time to take root and inspire some hope of becoming economically viable, as the electric vehicle and renewable energy examples show.

Third, even if a technology succeeds, we cannot know in advance which company in that field will succeed and therefore make for a good investment.

Aircraft and automobiles are the two top technologies of the 20th century that fundamentally changed how human beings live their lives, but both have been a graveyard of companies. Hardly any company in these industries has been a good investment for any extended period, at least globally.

Even in later technologies, the eventual winner is usually hard to foresee. Orkut was the dominant social network before Facebook took off and Facebook is already something that young people want to steer clear of. The examples of dominant players like Nokia and Blackberry losing out in mobile devices are well-known.

Many brilliantly successful companies have also had very chequered paths. Amazon, Apple and Tesla have all come within hours of bankruptcy, some more than once. There is no way any of them were predictably solid investments for most of their history.

As Savitz wrote six months ago: "While many fantastic ideas come from two guys in a garage, the companies with the best chance of leveraging innovation are those with the deepest pockets, the keenest marketing acumen, and the most customers. There's a reason that the key players in AI include Microsoft, Alphabet, Meta Platforms, Amazon.com, and Nvidia."

While the principle he talks about may be right, things have already changed overnight for the example he gave—the AI throne is under siege from DeepSeek, made by a bunch of young Chinese nerds.

Investing in technologies of the future may be in vogue, but it is fraught with risks at multiple levels.

Will the technology succeed? How long will acceptance take? Even if the technology takes off, will the players make money? Who will be the winners? How long will they be able to hold on to their thrones? If we go by base rates and statistical probabilities, the 'new' will rarely make for great investments. Of course, in hindsight, the dots will be connected to a straight line to illustrate how visionary investing made pots of money for 'someone.'

The author is chairperson, managing director and founder of First Global, an Indian and global asset management company, and author of 'Money, Myths and Mantras: The Ultimate Investment Guide'. Her X handle is @devinamehra