

We're Holding the Future Hostage

Believe it or not, we already have the tech for self-healing roads that repair potholes overnight, personalized nutrition pills that replace meals, and clothing that changes color with your mood — it's just collecting dust somewhere.

Imagine a world with holographic of family, friends, teachers, and concerts that appear in your living room, instant teleportation to avoid rush hour, and devices that let us talk to our pets, many of these innovations are much closer than you may think.

Today we'll explore why it took decades for everyday inventions like zippers and microwaves to catch on, uncover the hidden history of virtual reality, and discover how a 1968 tech demo predicted the future of Google Docs... 42 years early. And why these issues continue to affect the "futuristic" tech mentioned above. Buckle up, buttercup — because we're about to take a wild ride through the past, present, and potential of technology.

We've discovered a bunch of stuff that hasn't taken off yet. But, we often dismiss uses for existing tech in favor of the *next hot thing*, instead of fully utilizing what we have.

Time to Launch

Here's how long it took some stuff to take off:

- Zippers ~40 years.
- Microwaves ~30 years.
- Digital cameras ~25 years.
- Smartphones ~10 years
- 3d printing ~50 years and still hasn't taken off yet
- VR first headset 1968 and it was the "future" then

It took 5 years from Google's transformers breakthrough for ChatGPT to popularize the AI chatbot. Not to mention the decades of AI research before that which enabled Google to make that breakthrough. [We had early neural networks in the 1950s!](#)

Now, this example probably says more about how science builds on top of itself and technology has gotten cheaper and more powerful over time. But I mentioned it because GOOGLE absolutely had everything they needed to popularize this, but many believe they dropped the ball. We could have had all the fun of ChatGPT in 2017. I'm not sure if I'm being sarcastic with that last line. It's possible that Google was being more precocious and perhaps more responsible than OpenAI has been.

For color commentary, I really enjoy how Gunpei Yokoi (the original Game Boy designer) phrased this:

The Nintendo way of adapting technology is not to look for the state of the art but to utilize mature technology that can be mass-produced cheaply.

Which he also called this the “Lateral Thinking of Withered Technology” which kinda sums up what I’m talking about here and is a dope ass name. I aspire to name something so badass.

Taking this a bit further: Americans often yearn for a society similar to their view of Japan as this futuristic utopian. But few talk about how it is a lot easier to get adoption in a smaller, geographically restricted, and homogenous society. And, we helpfully ignore all the ways Japan is not futuristic, like how it is still a heavily paper-based and cash-dominated society. They’re still using fax machines!!! They love them. We could also go into societal issues, but I’m opting out for this particular essay. When I was younger, I incorrectly thought everyone in Japan was tapping to pay for everything since the 80s. Which itself is an example of why it is important to revisit and update our knowledge.

Failure to Launch

We’ve covered that tech can take a while to get adoption and why it might be helpful to look to the past, but not fully why all these technologies did not take off immediately. It isn’t for the same reasons.

The 3D printing scene has grown exponentially in recent times (especially hobbyists and small businesses), but 3D printing itself still hasn’t fully taken off because it still takes a bunch of steps, and it isn’t clear why most people would benefit from one. If tomorrow, a food printer came out that in one step produced Michelin star food, everyone would probably be lining up. But a lot of 3D printing gets you amateurish results without either investing a lot of money or doing a multistep process of the output of the printer. So they are now small enough and cheap enough (when they were first invented this wasn’t the case), but it remains relatively niche. This will likely change as people are now growing up and many libraries and school districts also offer access to 3D printing and education.

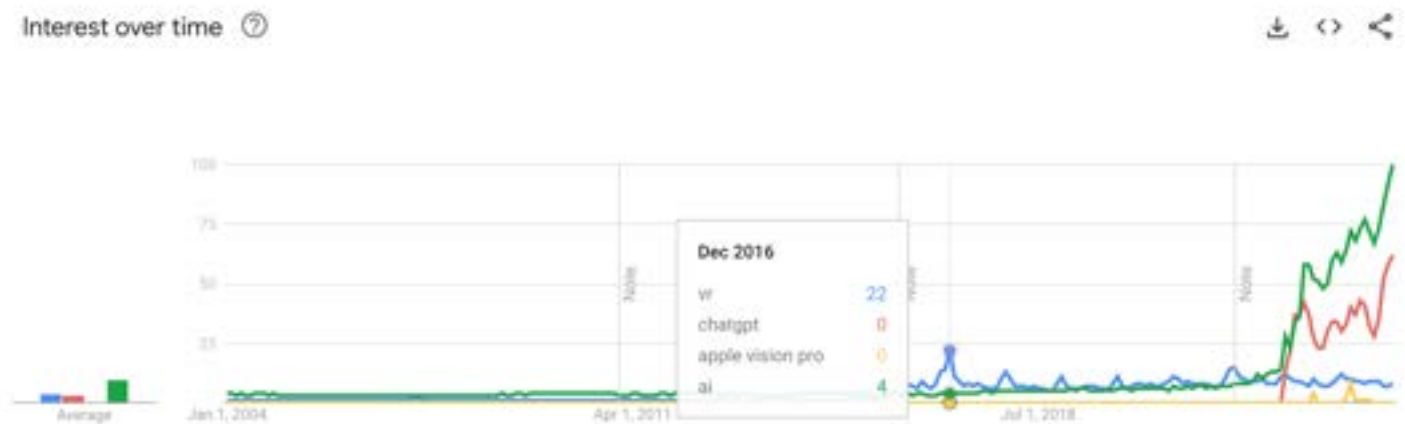
Microwaves were a different story. People hated them. They absolutely thought they were the devil incarnate. Sometimes we have something great, like let’s say vaccines, but some group of people oppose them for unfounded reasons. Of course, it’s easy to dismiss this as obvious and these people simply aren’t forward-thinking: but a necessary component of product adoption is the comfort level of people. And people were not comfortable with microwaves for a long time.

Other times, shit is just too expensive. Or bulky. Or ugly. Or it just hasn’t found a real reason. I think VR sets are a good example because while they have come a long way recently, they aren’t that different from when the VirtualBoy made everyone throw up.

I'm not even going to go deep into the Apple Vision Pro — the coolest piece of tech that I couldn't give a single fuck about.

If you search “VR gimmick”, I'm the number 2 search result. [It's a Medium article I wrote in 2018](#). And do you know why it's number 2? Probably because no one is even searching for VR. Maybe linking it here will boost the SEO enough to be number 1, which would be pretty funny. It will be like my article took 6 years to adopt, meaning I was only about 1 year slower than OpenAI!

Here's an image of a Google trend showing Apple Vision vs ChatGPT vs AI vs VR. It's mostly meaningless, but I think you can at least see the inflection point where ChatGPT became a phenomenon and I really wanted some visual content:



The main factors preventing adoption of technology are:

- people hate or fear the tech
- people don't get why it is relevant to their lives
- it costs way too much
- it's cool, but inconvenient
- there still needs to be a breakthrough
- we know what we need to do, but the tech doesn't exist yet
- some stuff just doesn't take off
- **no one put all the pieces together yet**

I'm very interested in that last one. Similar to Nintendo's philosophy, there is tons of technology hidden in research papers from 120 years ago waiting to be put to good use. For an irritating example, let's look to 1968.

The Mother of All Demos

Retroactively named, the [Mother of All Demos](#) showcased mesmerizing tech:

The 90-minute presentation demonstrated for the first time many of the fundamental elements of modern personal computing: windows, hypertext, graphics, efficient navigation and command input, video conferencing, the computer mouse, word processing, dynamic file linking, revision control, and a collaborative real-time editor.

Bruh, we didn't get Google docs with real-time editing until 2010. And this motherfucker DEMOED it in 1968. Oh, and he invented the mouse. So thanks Douglas Engelbart.

It's true that technology wasn't quite ready for prime-time for a bunch of those things. Video conferencing sticks out as an interesting example. But we still had "virtual meetings" as early as 1916.

Only a year after the invention of the transcontinental phone call, [5100 engineers were able to hop on a call together](#).

Everyone says all the ideas have already been done. Just because an idea has been thought of doesn't mean it was implemented or implemented well. And it doesn't mean ideas can't be used or combined in new ways. Personally, I think there are a lot of things that no one even imagined that have recently been invented. It's a lot easier to dream up and idea than invent it. I'd rather say, "Tons of ideas have been thought of, but few people gave enough of a fuck about them to affect the world in any way."

Save The Future

So how do we stop holding the future hostage? How do we more quickly disseminate technology so it is adopted quicker? How can we focus on the bottlenecks that prevent this tech?

Three things:

- individuals like you reading this. stop believing everything's been done when we haven't even implemented half the shit we've come up with as humans. you can be the lateral thinker who takes these ideas and makes something relevant to real people
- companies are overly focused on short-term growth, meaning their full r&d budgets are dedicated to basically doing bullshit. we need more individuals, governments, and companies to identify important technology and focus heavily on reducing cost and access
- we live in an interconnected world and people say we are more connected than ever. yet it is still difficult to get wide adoption of important things. we've been able to tiktokify fast fashion and a bunch of stuff that is terrible for ourselves and the planet, but there is no reason we can't use this same technology to increase awareness and adoption of important and life-changing things (and in some cases, likely have, but i'll leave that for another thought piece)

Let's rescue our future from the past, the present, and all the powers that be.