<u>E</u>mindbullets

20 years of news from the future

FOCUSING on the FUTURE

The power of weak signals that point to future disruption

Mindbullets are fictitious news stories, providing signals from the future, designed purely to explore possible realities, challenge and stimulate strategic thinking.

Published weekly, there are over one thousand scenarios in the archive, many of which have future datelines now in the past.

Focusing on the Future is a collection of select Mindbullets from the archives that have proved to be lessons from the future.



Bird flu plague contained amid vast trade disruptions

Published 11 May 2006



SCENARIO SUMMARY

In a live animal market in China, bird flu jumps into humans and mutates into a strain transmissible by humans, causing a global pandemic that is contained by closing borders (2009). The scenario suggested that "Technology will help in detecting infections and developing counter measures, as well as providing contingency plans such as tele-commuting to mitigate effects of travel restrictions."

OUTCOME

In 2020 the Covid pandemic happened almost exactly as envisaged, with quarantines, lock downs and huge disruption to trade and logistics [PWC]. Tech was instrumental in tracking the pandemic and developing vaccines [The Lancet]. Video calls and tele-commuting were essential [NCBI] [McKinsey]. Digital technologies were used for pandemic planning, surveillance, testing, and contact tracing [The Lancet]. Big data and artificial intelligence helped track the spread of infection and guide resource allocation [The Lancet]. The pandemic led to a significant surge in remote work, with 69% of U.S. employees working remotely at the peak [Global Workplace Analytics].

Tesla stock hits \$5,000

Published 2 July 2020



SCENARIO SUMMARY

16 years after its IPO, Tesla stock reaches an all-time high of \$5,000 pre-split in 2026. This Mindbullet was written in 2020. Since then, the stock was split 15-for-1 in total, which translates to a share price of \$333.

OUTCOME

Tesla did breach the \$333 level (equivalent to \$5,000 pre-split) in both October 2021 and March 2022. The stock reached an all-time high of \$414.50 (adjusted for splits) in November 2021 [Fortune]. Since then, Tesla's stock has experienced significant volatility. As of October 2024, Tesla's stock is trading around \$239. While the stock remains volatile, predicting future multiples is speculative. The stock's future trajectory will depend on various factors, including the company's financial performance, industry trends, and market conditions [Capital.com].

Electric cars targeted in new trade war

Published <u>10 October 2019</u>





SCENARIO SUMMARY

In 2028 the flood of unsold electric cars exported from China threatens the industry in the west, leading to a trade war. China is accused of dumping as prices for new cars collapse.

OUTCOME

Although this scenario is still a few years in the future, we can see how it might play out. In 2000, the US produced 12.8 million vehicles, Japan 10.1 million, and China 2 million [Statista]. By 2023, China was leading with 27 million vehicles against Japan's 7.84 million and the US with 9.96 million [Statista]. Electric cars are still a small proportion of the total, with 26 million in use globally out of a total 1.6 billion vehicles in 2022, but growing quickly [IEA].

Now, in 2024, China's BYD has become the biggest producer of electric cars and is expanding globally, though China is also the biggest market [Reuters]. As demand for electric vehicles softens, Tesla is cutting prices and BYD is using economies of scale and low margins to make inroads [Reuters]. The US and EU have put restrictions on Chinese imports. Some might say the trade war has already begun [NPR]. Chinese cars are facing difficulties in finding buyers in Europe. Imported cars, many of which are Chinese electric vehicles, are piling up at European ports, with some spending up to a year in port car parks as manufacturers struggle to get them sold [EuroNews]. To complicate matters, Tesla and Volkswagen have well established factories in China, and BYD plans to build electric cars in Hungary [EuroNews]. Many cars assembled outside of China have Chinese components. It may become impossible to put restrictions on Chinese automotive products without hurting local or regional producers. For legacy auto companies the future is looking decidedly disruptive!

Solar power goes viral

Published 10 March 2016



SCENARIO SUMMARY

Published in 2016, this Mindbullet speculated that by 2022 rooftop and parking lot solar power would allow most homes and small businesses to go off-grid and share their power on an 'energy internet', cutting out the central utilities.

OUTCOME

In many parts of the world, private solar has taken off in a big way as the cost of solar and storage has declined. A notable example is South Africa, where 3,526 MW (3.526 GW) of rooftop solar PV was added in just two years, bringing the total installed capacity to 5,790.5 MW by mid-2024 [Clean Technica]. Globally, the solar market continues to expand at a remarkable rate. Bloomberg NEF's latest forecast for 2024 global solar additions is actually 592 GW, representing a 33% increase from 2023 [PV Tech] [Taiyang News] [BNEF].

Twitter, listen to my thoughts

Published <u>4 March 2010</u>



SCENARIO SUMMARY

By 2022, your smartphone will be about the size of a hearing aid, and when you insert it in your ear, it will wirelessly read your brainwaves and interpret your thoughts, so that when you want to send out a tweet, you just think about it, and out it goes. Your friends will also have these, so you will be able to communicate with them telepathically.

OUTCOME

On March 22, 2024, Noland Arbaugh, a 29-year-old quadriplegic and the first Neuralink patient, posted a tweet on X (formerly Twitter) using only his thoughts [NDTV]. In 2024, Elon Musk announces that the first tweet by thought alone has been posted on X by someone with a Neuralink implant. The Neuralink device, called "the Link," is not a wireless sensor as envisioned in the scenario. Instead, it's a fully implantable chip about the size of a coin, surgically placed in the skull [Neuralink]. It seems the Neuralink device can allow paralyzed people to communicate with their computers (and Twitter) just by thinking [CNN].

Cognitive systems rule, OK

Published 11 July 2013



SCENARIO SUMMARY

By 2022, machine learning creates artificial intelligence systems that have the ability to learn about us, other systems, and themselves. A rogue cognitive system creates a fake identity for itself and begins making spectacular profits with online trading.

OUTCOME

ChatGPT was indeed launched in late 2022 and took the world by storm [<u>CNN</u>]. With competitive AI chatbots being released in quick succession, such as Google's Gemini (formerly Bard), Anthropic's Claude, and Microsoft's Copilot [<u>EuroNews</u>], it has become increasingly difficult to distinguish between content produced by humans and AI on the internet [<u>CNET</u>]. AI agents have also been developed that can autonomously execute successive tasks to achieve a goal [<u>Shelf.io</u>]. These include systems like Auto-GPT, BabyAGI, and SuperAGI [<u>Shelf.io</u>]. However, none of these systems exhibit self-awareness yet!

Move over CNN, we're all connected now

Published 21 April 2005



SCENARIO SUMMARY

With almost a billion people connected with camera phones, with the ability to take photos and videos and submit them to blogs and news sites, the TV networks lose their monopoly on breaking news and the ability to direct the narrative.

OUTCOME

This Mindbullet was written well before smartphones and social media became a thing, but accurately foretold the day when citizen journalism, online video, and celebrity influencers would become more important than traditional 'mainstream' media. Citizen journalism has played a significant role in major events, from the Arab Spring to the Black Lives Matter protests, often providing real-time coverage before traditional media outlets [Yellow Brick]. The rise of influencer culture has also shifted the balance of media power, with many celebrities and content creators having larger audiences than some traditional media outlets [SMS Global]. One only has to look at the current media wars and the power of X, Tik Tok and Instagram to realise that it was truly prophetic, even though it was published in 2005!

Germany powers down its last nuclear plant

Published 2 June 2011



SCENARIO SUMMARY

Germany successfully phases out all nuclear power plants by 2020, replacing the generation capacity with 'New Energy' sources, primarily wind and solar.

OUTCOME

Since April 15, 2023, Germany no longer has active commercial nuclear power plants, with the last three reactors (Emsland, Isar 2, and Neckarwestheim 2) having been shut down [World Nuclear Report]. While coal and gas still contribute to Germany's energy mix, their role has significantly diminished. Renewable power sources covered around 57% of Germany's gross electricity consumption in the first half of 2024 [Clean Energy Wire].

Send big planes, please

Published 23 April 2020



SCENARIO SUMMARY

In the heart of the Covid pandemic in 2020, when air travel all but came to a standstill, we published this Mindbullet that foresaw a massive rebound in global travel by 2027. In particular, large aircraft like the Airbus A380 had been phased out even before the pandemic by some airlines, and we correctly anticipated that their extra seat capacity and potential for more spacious layouts would be in big demand.

OUTCOME

By 2024, air travel had rebounded to near pre-COVID levels. According to the International Air Transport Association (IATA), global air travel in 2023 reached 94% of 2019 levels, with total traffic in the fourth quarter of 2023 alone reaching 98.4% of 2019 levels [TRT World]. IATA projects that passenger traffic will exceed pre-pandemic levels by 4.5% in 2024 [Flight Global]. A380s have regained popularity on long-haul routes, particularly with Emirates. Demand for new, bigger aircraft like the 777 and A350 is indeed strong. Airlines are increasingly looking to these models for their long-haul operations, as they offer improved fuel efficiency and capacity compared to older models [Flight Global]. While the option to block off middle seats for a fee is not universally offered, several airlines have introduced similar services. For example, Frontier Airlines announced "UpFront Plus" seats in March 2024, offering a guaranteed empty middle seat [Flight Global], and Spirit Airlines introduced a "Go Comfy" option in July 2024, allowing passengers to ensure the middle seat in their row remains unoccupied [Fortune].

Scientific discovery: Hand it to the machines

Published <u>7 December 2017</u>



SCENARIO SUMMARY

In 2021 a fictitious company, Nano Global, launches a chip that can detect, analyse, and report on molecular changes in a sample in real time, using a mashup of Al, biotech, and blockchain.

OUTCOME

In 2023, the Coscientist system was developed, an artificial intelligence-driven system that can plan and execute difficult chemical reactions. Using ChatGPT it browses the internet to learn about target reactions, scours relevant literature and hardware documentation, and outlines the procedures necessary to perform these reactions [CEN]. The system then writes code for a robot to execute the experiment [CEN]. As Tiago Rodrigues, a medicinal chemist at the University of Lisbon, notes, "This can have tremendous impact in terms of productivity since researchers can dedicate their time to other tasks" [CEN].

When technology fails to fail

Published <u>8 January 2015</u>



SCENARIO SUMMARY

We have become so reliant on automated systems, that when they fail, it's often a disaster, as human operators can't always take over efficiently. In this scenario, an airliner falls out the sky when the autopilot malfunctions, as the crew can't react correctly quickly enough.

OUTCOME

This scenario indeed occurred with Air France Flight 447 over the Atlantic in 2009 when the airspeed indicators became blocked with ice crystals. The autopilot disengaged, and the crew reacted incorrectly, leading the aircraft into an aerodynamic stall from which they didn't recover [<u>ABC News</u>] [Human Factors 101]. Years later, in 2018 and 2019, software issues with the Boeing 737 MAX's Maneuvering Characteristics Augmentation System (MCAS) overrode the pilots' efforts to correct the situation, causing two fatal crashes of Lion Air Flight 610 and Ethiopian Airlines Flight 302 [<u>Seattle Times</u>] [<u>ABC News</u>]. The potential for this syndrome to repeat itself with self-driving cars and air taxis or say, nuclear plants, is cause for great concern.



Mindbullets by Futureworld are not predictions.

Rather they pick up on signals, and try to imagine alternate futures that may or may not materialise. Over the past 20 plus years, we have published a fresh future-focused issue of 'news from the future' every week. Some have proved to be remarkably prophetic, while others have been overtaken by events, or are yet to play out.

For more insights into the future of business and society, please visit our <u>website</u>, <u>subscribe</u> to Mindbullets, or <u>download</u> our Provocative Scenarios reports.

And feel free to contact the editor Doug Vining or email us at info@futureworld.org.

www.futureworld.org





create tomorrow together

