Global Tech Layoffs Analysis (2022-2024) *Uncovering the Relationship between Funding, Geography, and Workforce Reductions*

This project presents an end-to-end data story that transforms raw, fragmented layoff data into clear strategic insight, demonstrating both technical strength and disciplined analytical thinking. The journey begins with a structured roadmap that mirrors real-world data engineering practices. In the first phase, data cleaning establishes trust in the dataset by resolving missing values, removing inconsistencies, and standardizing company names and industry categories, creating a solid foundation for meaningful analysis. The second phase focuses on DAX engineering, where dynamic measures are carefully designed to calculate total layoffs, layoff percentages, and funding metrics. These KPIs are built to respond instantly to filters and slicers, ensuring accuracy, flexibility, and consistency across the entire report. The final phase brings the data to life through visual analytics, linking time, funding, geography, and industry dimensions to uncover patterns that are not immediately visible in raw numbers and translating complexity into decision-ready insights.

At the heart of the dashboard are three core business questions that define the project's analytical value.

- The first KPI, the Time Factor, examines whether layoffs are continuing to accelerate or beginning to stabilize, using a time-series line chart from 2022 to 2024 to reveal the broader trajectory of workforce contraction and early signs of recovery.
- The second KPI, the Funding Paradox, challenges the assumption that well-funded companies are inherently more stable by using a scatter chart with a trend line to expose the relationship between funding levels and workforce reductions.
- The third KPI, the Geography of Impact, shows where the crisis hit hardest by combining map and treemap visuals to highlight the most affected continents and industries.

The overall experience is designed for exploration, allowing users to filter by year, industry, or region, drill down into individual companies, and rely on live, measure-driven calculations that update automatically, ensuring that insights remain accurate, interactive, and actionable across all analytical scenarios.

GLOBAL LAYOFFS INSIGHTS

Industry Analysis

Reset

2020
2021
2022

country
All

industry
All

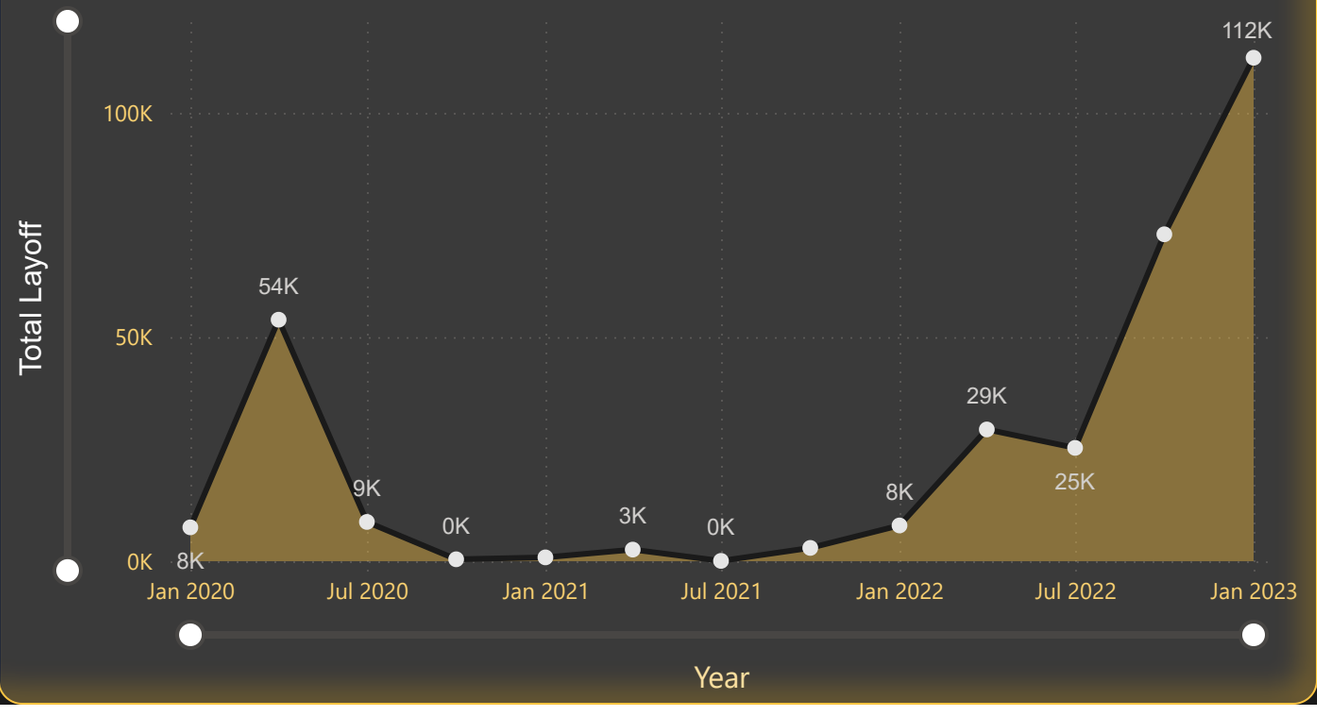
stage
All

Investment...
$0
$121,900

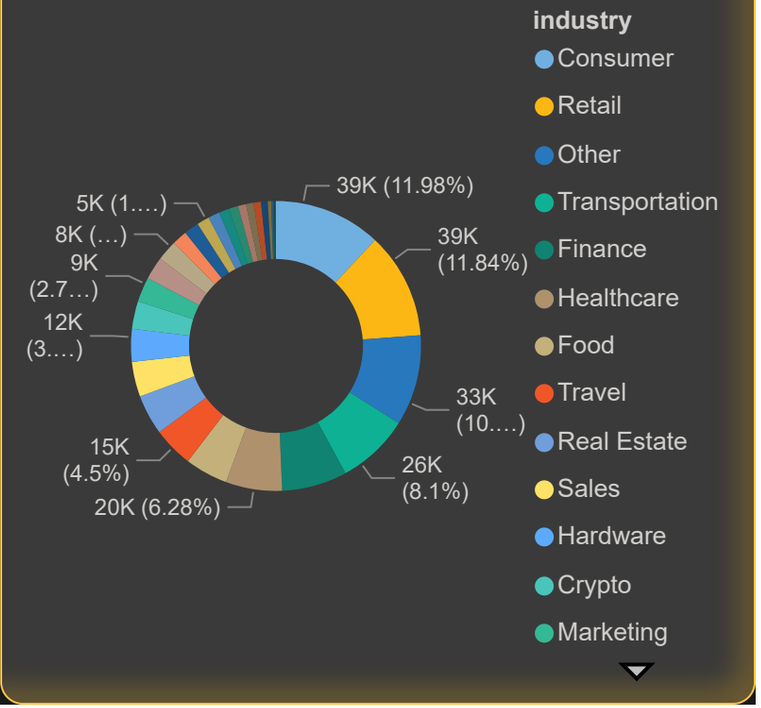
KPI Ribbon

325K	1028	272.57	901.79K
Total Layoff	affected companies	avarage_layoff	impacted_funding

Total Layoff by Year and Quarter

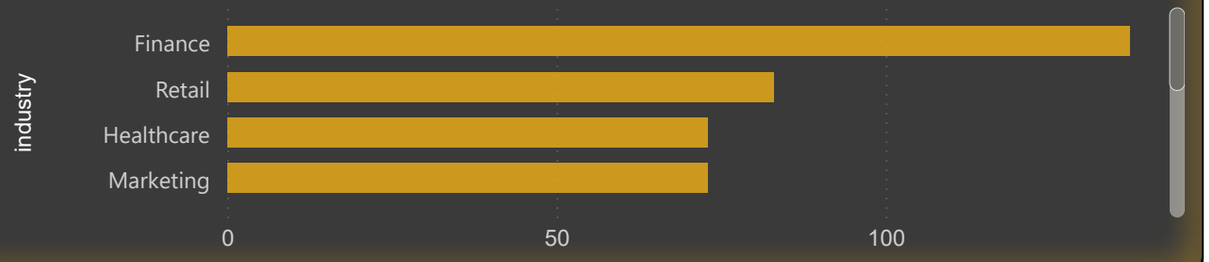


Total Layoff by industry

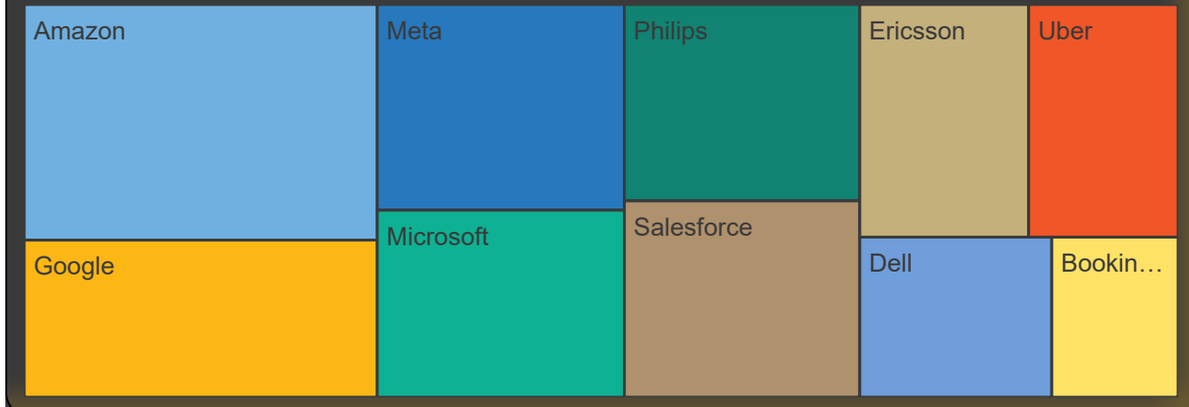


The Scale Of Human Losses in each Top 10 Industry

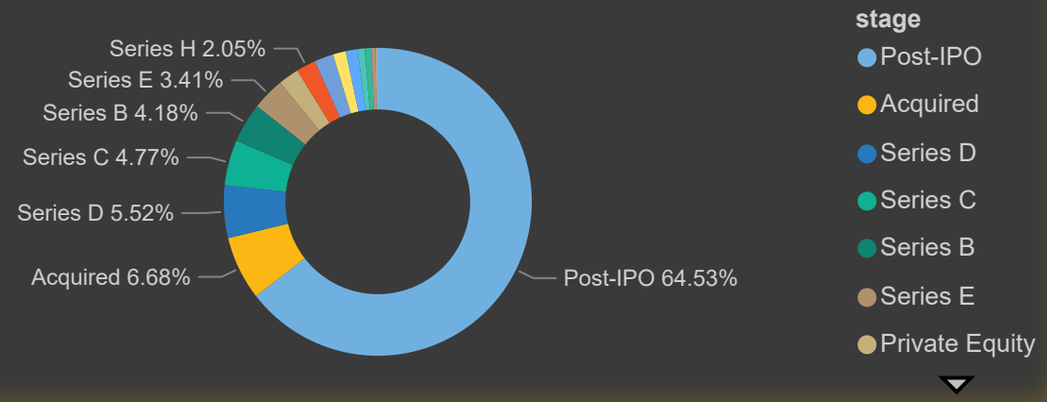
The Top 10 Extent Of The Crisis's Spread Within The Sector.



Company Layoff V

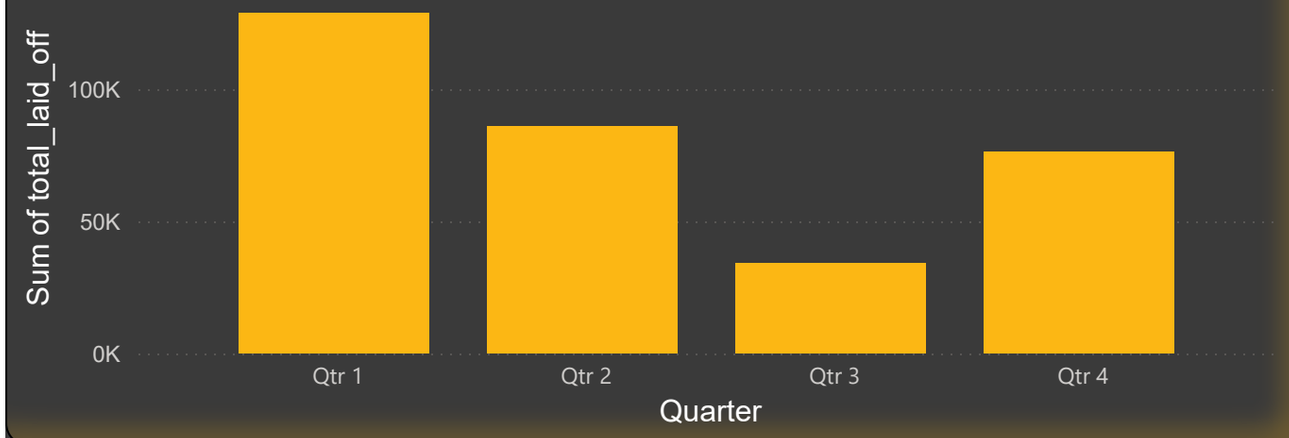


Sum of total_laid_off by stage

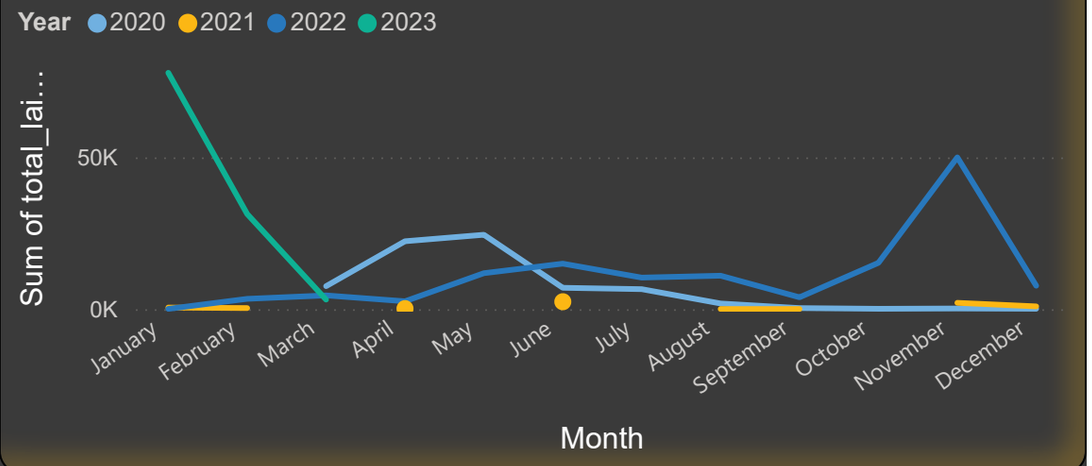


company	industry	stage	Sum of total_laid_off	Year	Quarter	Month	Day
Google	Consumer	Post-IPO	12000	2023	Qtr 1	January	20
Meta	Consumer	Post-IPO	11000	2022	Qtr 4	November	9
Amazon	Retail	Post-IPO	10000	2022	Qtr 4	November	16
Microsoft	Other	Post-IPO	10000	2023	Qtr 1	January	18
Ericsson	Other	Post-IPO	8500	2023	Qtr 1	February	24
Amazon	Retail	Post-IPO	8000	2023	Qtr 1	January	4
Total			**325451**				

Which Sectors Faced the Most Cuts quarter ?

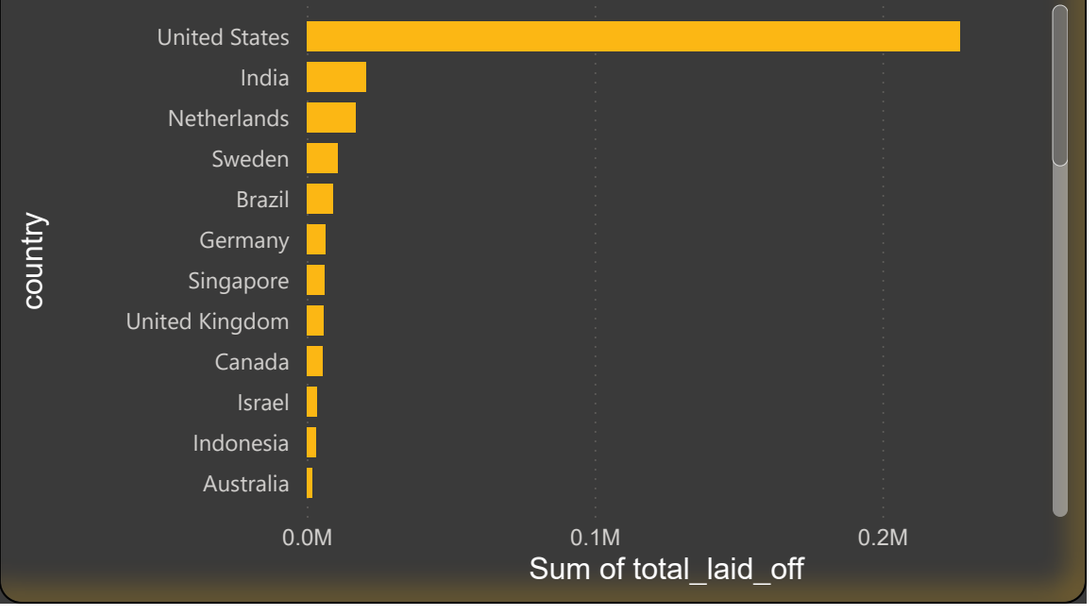


Total Layoffs over Time Monthly

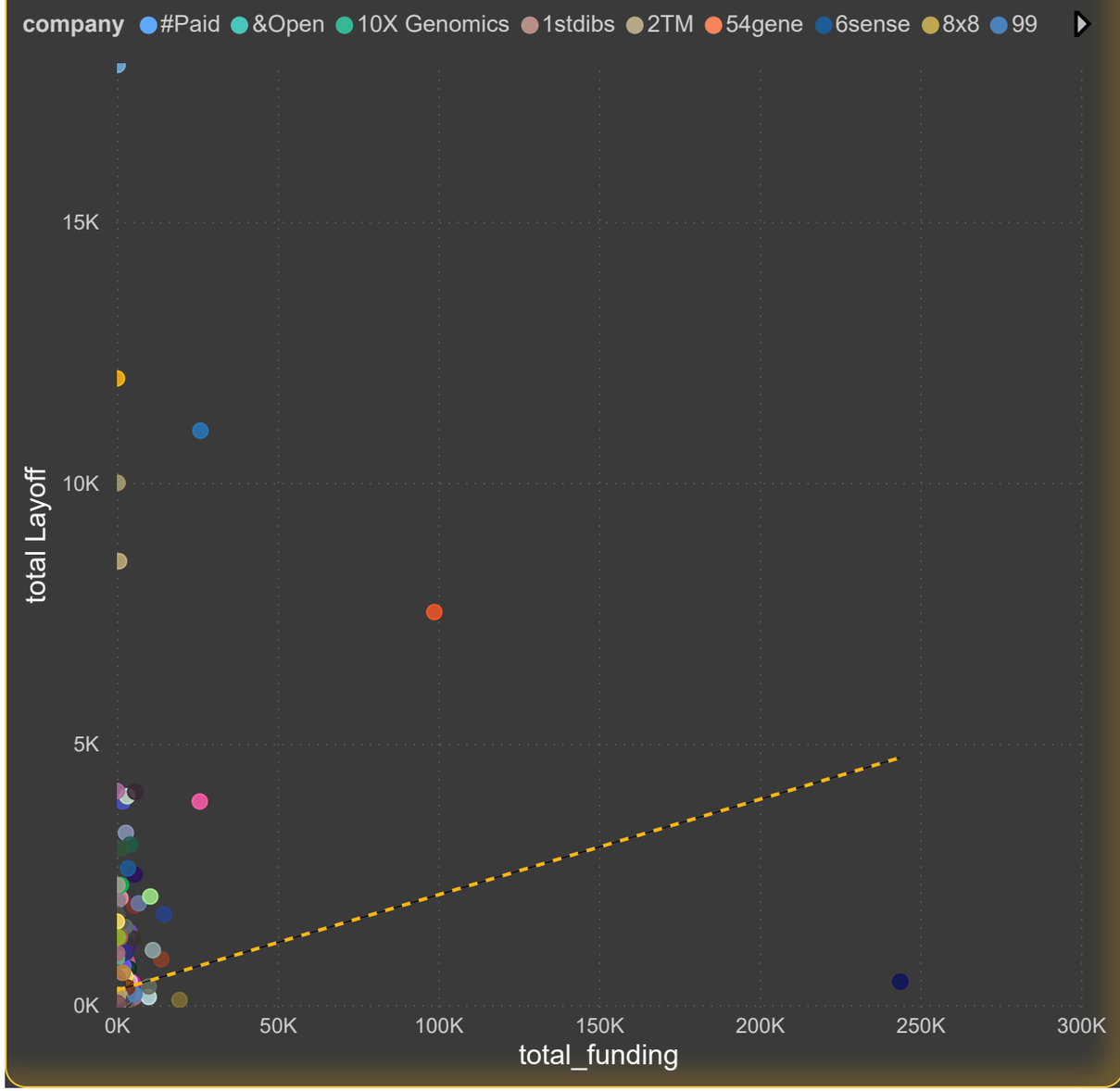


Global Epicenters of the Tech Winter.

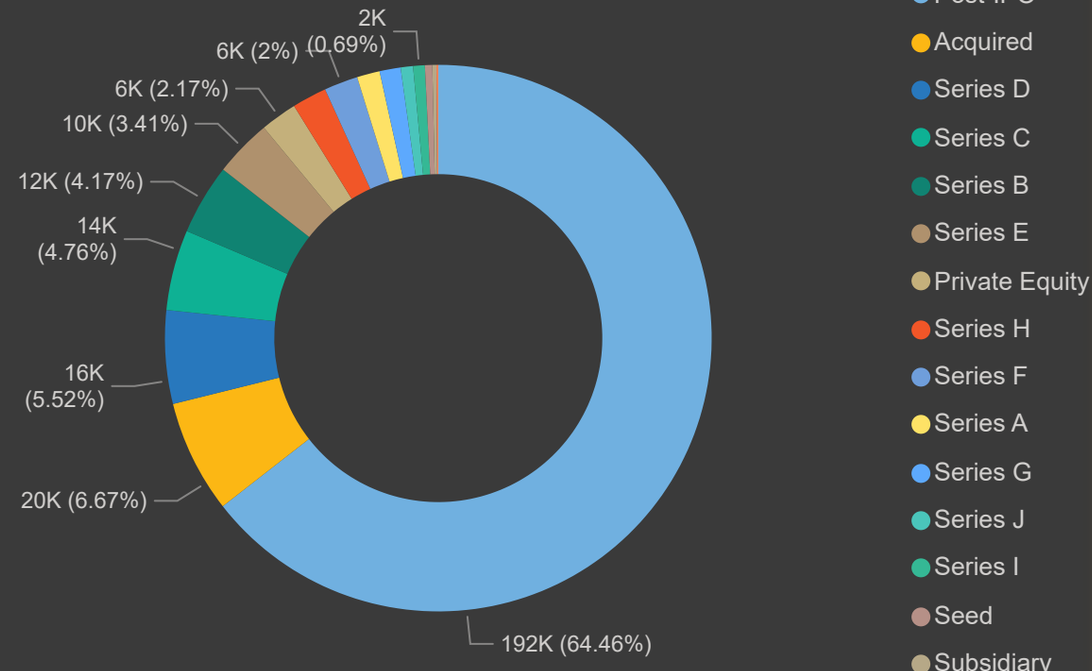
Countries of high layoffs



Impact of Capital: Funding vs. Workforce Reduction



Total Layoff by stage



Lessons from the Tech Downturn

Our journey through the data began with a simple question: What really happened to the tech giants between 2022 and 2024? As we cleaned the noise and engineered the metrics, a striking narrative emerged. We discovered that the 'Great Layoff' was not a random storm, but a calculated correction. Our timeline reveals that while 2023 was the eye of the hurricane, the industry is finally beginning to find its footing in 2024, showing early signs of stabilization. Perhaps the most provocative chapter of this story is the Funding Paradox: the data silenced the myth that 'more capital equals more safety.' Instead, we found a high-stakes correlation where the most heavily funded unicorns often faced the steepest cuts—proving that aggressive over-hiring fueled by venture capital created a fragility that lean, disciplined companies managed to avoid. Geographically, while the tremors began in Silicon Valley, the aftershocks redefined the tech landscapes of Europe and India, particularly in the Consumer and Retail sectors. Ultimately, this analysis proves that in the modern tech economy, resilience isn't bought with funding—it's built through sustainable growth. We didn't just map job losses; we mapped the evolution of an industry learning to value efficiency over excess."

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some problems with some solutions :-

The Problem: Between 2020 and 2022, tech companies over-hired based on "pandemic-era" demand, assuming the digital boom would never end. They treated human capital as a scalable commodity rather than a long-term investment.
My Opinion: This was a massive failure in capacity planning. Business leaders mistook a "temporary spike" for a "permanent shift." It was a classic case of corporate FOMO (Fear Of Missing Out).
Suggestion: Companies must adopt Elastic Workforce Models. Instead of massive full-time hiring during peaks, they should use a mix of core staff and specialized contractors to absorb volatility without the need for traumatic mass layoffs later.

The Problem: When interest rates were near zero, "Easy Money" fueled unsustainable burn rates. Companies focused on valuation rather than profitability.
My Opinion: The "Funding Paradox" we found proves that too much capital can be toxic. It encourages "sloppy" management because there is no pressure to be efficient until the money runs out.
Suggestion: Investors and Boards should shift KPIs from "Top-line Growth" to "Unit Economics" much earlier. Resilience comes from a healthy "Burn Multiple" (how much you spend to generate each $1 of new revenue).

The Problem: Evidence suggests that many tech layoffs were "socially contagious." Once big players like Meta or Google cut staff, smaller companies followed suit even if their balance sheets were healthy, simply because the market "expected" it.
My Opinion: This is a failure of Strategic Independence. Leaders often used the "economic downturn" as a convenient excuse to trim "fat" they shouldn't have accumulated in the first place, damaging their Employer Brand for years to come.
Suggestion: Focus on Radical Transparency. Companies like *Buffer* or *HubSpot* that communicated financial health clearly avoided the panic-hiring/panic-firing cycle. Transparency builds a culture that can survive a pivot without a purge.

The Problem: Companies are firing in "Traditional Tech" roles while simultaneously hiring aggressively in "AI and Data Science."
My Opinion: The cost of firing and then re-hiring for new skills is 3x more expensive than upskilling existing talent. This "churn-and-burn" approach destroys institutional knowledge.
Suggestion: Implement Internal Talent Marketplaces. Instead of laying off a 5-year veteran because their specific sub-department is shrinking, use AI-driven internal platforms to re-skill and transition them into high-growth areas.