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Huge Technology Layoffs 2022 - 2023: Examining Job Security in the Technology Industry

Gbemisola Adewuya[1], Oladapo Asaolu[2]

Advance Business Intelligence & Data Analytics

Senior Project Manager
Email: *gadewuya[at]outlook.com;*
asaolu.dapo[at]gmail.com

Abstract: ***Companies in the technology industry have been impacted differently by the COVID-19 pandemic, with some experiencing rapid growth and increased demand, while others have struggled to adapt and maintain revenue. Economic downturns and market fluctuations can contribute to layoffs and job insecurity. Rapid technological advancement and automation can make certain job roles redundant. Mergers, acquisitions, and company restructuring can also lead to job losses. Therefore, many companies have implemented cost - cutting measures, including layoffs and furloughs, to mitigate the financial impact of the pandemic. Remote work has become more common in the industry, with some companies announcing permanent work - from - home policies. While the rise of artificial intelligence, machine learning, and data analytics is creating new job opportunities in areas such as data science and AI engineering.***

Keywords: COVID-19 Pandemic, Technology, Job security, Employment, Remote Work, Artificial Intelligence

1. Introduction

The technology industry in the United States has seen rapid growth in the past few years. However, with the onset of the COVID-19 pandemic, the industry has been hit hard with layoffs and job losses. This has caused a great deal of uncertainty for those employed in the technology industry, as well as those looking to enter the field. This paper will examine the current state of job security in the technology industry in the United States and will look at the potential for layoffs in 2022 - 2023.

Technology layoffs are a reality of the modern economy. As technology advances, companies are forced to make difficult decisions to remain competitive. Layoffs are a common way for companies to reduce costs and remain competitive. The tons of rapid speed from global tech giants laying off their workforces is casting a troubling reality on job security and the viability of the global tech industry. Technology firms—including Amazon, Google, Microsoft, and Meta—have been especially hard - hit by the economic downturn. Some 159, 786 jobs have been cut by tech firms last year, according to layoffs. fyi, a website that tracks job cuts across the industry. So far, in 2023, an additional 98, 100 employees have been laid off by tech firms. This global concern poses significant readiness in emerging technology industries such as in Africa and Nigeria. It is important to determine how much of an impact the layoff trend will have on the Nigerian tech space as it emerges.

The technology industry is in a state of flux, with huge layoffs expected in 2022 - 2023. This is a worrying trend, as it puts job security in the technology industry in jeopardy. The technology industry is constantly evolving, and companies are often forced to make difficult decisions to remain competitive. As a result, layoffs are sometimes necessary to reduce costs and remain profitable. This can be a difficult pill to swallow for those affected, but it is important to remember that the industry is still growing. Companies are still investing in new technology, and there are still plenty of opportunities for those with the right skills. Therefore, the technology industry is still a great place to work. Despite the expected layoffs, job security remains strong. Companies are still investing in new technology, and there are still plenty of opportunities for those with the right skills. For those who are worried about job security, it is important to remember that the industry is still growing and that there are still plenty of opportunities. With the right attitude and skills, the technology industry can still be a great place to work.

The tech sector layoffs in the U. S. show no signs of slowing down. This week, online marketplace Poshmark and telecommunications giant Ericsson became the latest companies to announce major job cuts. So far in 2023, Crunchbase News estimates that more than 102, 000 jobs have been lost in the U. S. tech industry. This includes both Poshmark's undisclosed layoffs following an acquisition and Ericsson's 8, 500 - person reduction. The job losses in 2020 were even more dramatic, with over 140, 000 positions disappearing between public and private tech companies. This is a result of businesses having to adjust to rising prices and a volatile stock market. Startups have had to take drastic measures to stay afloat in this cold economic climate, and many have had to tighten their belts and reduce their workforce (Vedentam, 2023)

The most daunting challenge is that recently, tech jobs seem to be disappearing faster than the steam from a pot of boiling water. For example, a pay - later company, says it is cutting 19% of its workforce after reporting a larger - than - expected loss last quarter. Alphabet, the parent company of Google, recently laid off 12, 000 workers or 12% of its workforce. Meta cut even more staff. Even IBM, which has been around for 111 years, is cutting thousands of jobs. As of now, 297 tech companies have laid off nearly 95, 000 workers, according to data compiled by Layoffs. fyi, a website that tracks tech layoffs since March 2020. If that rate continues, the industry could cut more than 900, 000 jobs for the year. According to the website, this is almost six times the total number of industries by 2022. (Buchwald and Zarrcina, 2023).

From the foregoing fact, it is crystal that recent years have seen an increase in the number of tech layoffs, causing concerns about job security in the industry. Therefore, this study aims to examine the factors contributing to tech layoffs and assess the level of job security in the technology industry, particularly in the United States of America which will contribute to a better understanding of the challenges facing tech workers and the industry as a whole and provide valuable insights for policymakers, industry leaders, and workers.

2. Literature Review

The Concept of Layoffs

Layoff is a difficult but necessary action taken by businesses to ensure their long - term success. It is the process of reducing the number of employees in a company due to financial or organizational reasons. Layoff can be a difficult decision for businesses, as it involves the termination of employees who have devoted their time and energy to the company.

Layoff can be a difficult decision for employees as well. It can cause financial hardship and emotional distress. Despite this, it is important to remember that a layoff is a necessary tool for businesses to remain competitive and profitable. It is a sign that a business is taking proactive steps to ensure its long - term success. Therefore, a layoff is an important tool for businesses to remain competitive and profitable. It is a difficult decision for both employers and employees, but it is a necessary step for businesses to take to ensure their long - term success. It is important to recognize the importance of layoff and to understand that it is a necessary part of the business.

Job Security

Job security has been identified and presented in different ways by researchers and practitioners. The term is understood as the state of knowing that the job is safe and it's not vulnerable to termination. According to Borland (1999), job security is defined as a release from the fear of losing a job. According to Simon Stapleton (2009), job security is defined as an employee's assurance or belief that they will keep their current jobs.

Ralph Heibutzki (2013) discussed the importance of job security in the technology industry, particularly in light of the changing nature of work and the increasing prevalence of automation and artificial intelligence. He argued that job security is a critical issue for technology workers, given the potential for rapid technological change to disrupt entire industries and displace workers. Heibutzki also noted that job insecurity can have negative consequences for workers' mental health and well - being, as well as for their financial stability and career prospects. He emphasized the importance of policies that promote job security and protect workers from the negative effects of technological change, such as retraining programs and income support for displaced workers. Overall, Heibutzki's work underscores the need for a deeper understanding of the complex interplay between technology, employment, and job security in the modern economy.

Also, a study by the European Union found that job security works effectively on job satisfaction and productivity for both genders in seven EU countries consider (Nikolaou, Theodossiou and Vasileiou, 2002). According to Arabi, job security is the feeling of having a decent job and ensuring its sustainability in the future as well as the absence of threatening factors (Jandaghi, Gholamreza & Mokhles, Ali & Bahrami, Hamid.2011).

It is an undeniable fact that job security is a major concern for technology companies in the United States. The rapid pace of technological advancement has caused a shift in the job market, making it difficult for companies to keep up with the changing trends. Consequently, many technology companies are struggling to remain competitive and maintain job security for their employees.

The need for job security in the technology sector is further highlighted by the fact that many of these companies are dependent on their employees to keep up with the ever - evolving landscape of technology. Without the right employees, companies are unable to innovate and stay ahead of the competition. As a result, job security is essential for technology companies to remain competitive.

Job security is a critical issue for technology companies in the United States. Companies must take steps to ensure that their employees have the necessary skills and knowledge to remain competitive in the ever - changing technological landscape. This is an important step in ensuring the long - term success of these companies and their employees. It is encouraging to see that many technology companies are taking this issue seriously and are taking steps to ensure job security for their employees.

Layoffs in the tech sector have increased significantly in 2022 amid an increasingly volatile economy. As of December 2022, more than 150, 000 tech startup employees around the world have been laid off during the year at more than 970 companies. More than half of the layoffs were in the United States, where startups have struggled to raise new capital in an environment characterized by concerns about high inflation, rising interest rates, economic growth, and high inflation, economic slowdown and geopolitical tensions. Notable examples include tech companies like Meta, Amazon, Twitter, Uber, and Netflix were downsizing, citing several reasons including the pandemic, hiring and restructuring due to rapid growth, and economic uncertainty that companies face in 2023 ahead of an impending recession. For example, in November 2022, Twitter laid off 3, 700 employees - about 50% of its total workforce - in an attempt to reorganize teams and change the company's business model after being acquired by Elon Musk. Meanwhile, Meta, which owns Facebook, Instagram and WhatsApp, on November 9 announced it was laying off 11, 000 employees, representing 13% of its workforce, amid falling revenue and plunging stock prices. Meta's cut is the largest company in the tech industry since the start of the pandemic. Mark Zuckerberg, CEO of Meta, blames "macroeconomic slowdown" and "increased competition" alongside unrealistic growth forecasts based on the company's strong revenue performance during the pandemic. (Owens, 2023).

What are the forecasts for 2023?

Going forward, with the IMF predicting that more than a third of the global economy will shrink by 2022 or 2023, layoffs are likely to continue at some tech startups. The long - term outlook for jobs in the tech industry looks promising: For example, by 2032, tech jobs in the United States are expected to grow from 5.4 million people to more than 6 million people.

The Impact of Layoffs on Technology Industries' Employees

Layoffs can have a devastating effect on employees. They can cause financial hardship, emotional distress, and a lack of job security. Employees may also feel betrayed by their employer, as they may have invested time and energy into the company only to be let go.

Layoffs can also hurt the company. It can lead to a decrease in morale, a decrease in productivity, and a decrease in customer satisfaction. It can also lead to a decrease in innovation, as employees may be hesitant to take risks or suggest new ideas. Despite the negative effects of layoffs, they can be necessary for a company to remain competitive. Companies must make difficult decisions to remain competitive, and layoffs can be a part of that process. Companies should strive to make layoffs as humane as possible, providing severance packages and job placement services to help employees transition to new jobs.

Therefore, technology layoffs are a reality of the modern economy. They can have a devastating effect on employees and the company, but they can also be necessary for a company to remain competitive. Companies should strive to make layoffs as humane as possible, providing severance packages and job placement services to help employees transition to new jobs.

Causes of Huge technology Industries' Layoffs

What led to the increase in layoffs?

Severe job losses in the tech industry began to occur during the coronavirus pandemic when nearly 70, 000 employees of tech startups lost their jobs in the first and second quarters of 2020. This is partly because lockdown measures and movement restrictions force businesses to cut costs. At the time, tech startups in industries like transportation, finance and travel were hit the hardest. From the second half of 2020 to the end of 2021, the job loss rate in tech startups has dropped significantly due to increased venture capital spending on the internet, technology, mobile companies, telecommunications, software and other companies. However, in the second quarter of 2022, a wave of layoffs from tech startups resurfaced amid changing consumer preferences, global economic disruptions and stock markets. full of volatility. Indeed, these disruptions have resulted in falling business valuations, slow revenue growth, and cost - cutting measures to reduce operating costs, with tech startups finding it difficult. in raising new capital.

Economic depression

The recession debate in the United States began when data from the US Bureau of Economic Analysis showed the economy contracted in July 2022 for the second straight quarter. Economists are uncertain and fears of a recession still hang over the media. Other conditions threaten the health of the economy, such as the public debt ceiling, the war in Ukraine, the ongoing pandemic and rising interest rates. Thus, companies turn to layoffs as a survival method to cut costs as sales and profits decline (Giunipero, L. C., Denslow, D., &Rynarzewska, A. I.2022)

Inflation

According to the Federal Reserve, when inflation hit the economy hard in June 2022, consumer prices rose 9.1% from the usual 2% annual rate for inflation. Also, according to the US Bureau of Labor Statistics (BLS), 2022 saw the highest inflation rate in 40 years. The economy slowed as people started buying less to accommodate these higher prices. The cost of living skyrocketed and individuals and businesses had to cut back. Tech companies have seen service prices go up, so companies have had to evaluate and cut as needed. Businesses are looking for ways to cut costs to cover rising costs due to inflation. Laying off employees is often one of the first cost - cutting measures, as it is one of the biggest costs of a business. Tech companies lose revenue as companies cut back on advertising. Tech companies, such as Meta, Google, Instagram, Snap, and ByteDance, have business models that rely on selling ads. (Hetler, 2023).

Impact of COVID-19

The COVID-19 pandemic has had a devastating impact on the technology industry in the United States. Many companies have had to lay off employees to cut costs and remain profitable. This has caused a great deal of uncertainty for those employed in the technology industry, as well as those looking to enter the field. As COVID-19 swept through the country, consumers quickly tightened their wallets, resulting in massive job losses. And while there was a need for tech workers before the pandemic, like most industries, tech wasn't immune to layoffs during the crisis. In August 2020, the unemployment rate in the tech sector peaked at 4.6%, while the overall unemployment rate for the country was 8.4%. (Buchwald, E. and Zarrcina, J.2023). Also, the COVID-19 pandemic has accelerated the adoption of remote work in the United States, with implications for employment, productivity, and job security in the technology industry (Aral and Brynjolfsson.2021).

The Impact of Automation

Automation has been a major factor in the technology industry for many years. Automation has allowed companies to reduce costs and increase efficiency. However, automation has also led to job losses in the technology industry, as many tasks that were once done by humans are now done by machines. This has caused a great deal of uncertainty for those employed in the technology industry, as well as those looking to enter the field.

Potential for Layoffs in 2022 - 2023

The potential for layoffs in the technology industry in 2022 - 2023 is uncertain. Many companies are still struggling to recover from the economic impact of the COVID-19 pandemic and may need to make further cuts to remain profitable. Additionally, automation is likely to continue to be a factor in the technology industry, leading to further job losses.

Higher interest rates

The Federal Reserve raised interest rates seven times in 2022 and could increase them further in 2023. The Fed raises these rates to slow economic growth and discourage consumers and businesses from spending. consumption, which reduces demand and ultimately lowers prices. Higher interest rates affect the amount a business wants to borrow due to higher costs. These higher rates have a direct impact on venture capitalists (VCs) and other startup funds. Companies are reluctant to invest in riskier sectors when the future of the economy is uncertain. Economic uncertainties are causing companies to re - evaluate their hiring and growth strategies (Hetler, 2023).

Remote Work

Remote work, also known as telecommuting or telework, has become increasingly popular in recent years, particularly due to the COVID-19 pandemic. Many companies have had to transition to remote work to comply with social distancing guidelines, and as a result, remote work has become more widely accepted and normalized. This literature review will explore some of the research on remote work, including its benefits, challenges, and potential implications for job security.

Benefits of Remote Work

Several studies have highlighted the benefits of remote work. For example, remote work has been linked to increased job satisfaction (Gajendran & Harrison, 2007; Golden &Veiga, 2008), greater work - life balance (Shockley & Allen, 2007), and higher productivity (Bloom et al., 2015). Remote work can also have positive impacts on employee health and well - being, reducing stress and promoting better sleep (Bakker et al., 2018).

Challenges of Remote Work

Despite the potential benefits of remote work, there are also some challenges to consider. One of the primary concerns is social isolation and loneliness, as remote workers may feel disconnected from their colleagues and miss out on the social interactions that typically occur in a traditional workplace (Golden &Veiga, 2008). Communication can also be more difficult in remote work environments, particularly when working across time zones or cultural differences (Hertel et al., 2019). Additionally, remote work can blur the boundaries between work and personal life, making it more difficult to separate work time from personal time (Allen et al., 2013).

Implications for Job Security

Remote work has potential implications for job security. For example, remote work may allow companies to expand their talent pool, as they can recruit and hire employees from a wider geographic area (Golden &Veiga, 2008). However, remote work can also lead to feelings of insecurity and uncertainty among employees, particularly if they are working on a project that may be outsourced or offshored (Hertel et al., 2019). Additionally, remote workers may feel more pressure to demonstrate their productivity and performance, which could impact their job security (Allen et al., 2013).

3. Methodology

This study will be conducted using quantitative research method. The industry reports and labor statistics that would be used can be classified as secondary data which is a type of quantitative research methodology. Secondary data is data that has been previously collected by someone else for a different purpose than the current research, such as industry reports, labor statistics, and published articles. This data can be collected from various sources, such as government agencies, research institutions, and private companies. We included only US - based companies or companies with a strong US presence. We included both startups and publicly traded technology - intensive companies. We also included companies based elsewhere with large US teams, such as Klarna, even if it is unclear what proportion of the US workforce has been affected by layoffs. We received layoffs from media reports, social media posts, data visualization portal such as Kaggle. com and layoffs. fyi which is a community - powered database about technology layoffs.

4. Analysis of the Findings

The analysis will examine the data collected through the research methods and conclude the factors contributing to tech layoffs and the level of job security in the technology industry. The results will be compared with existing literature and previous studies on the topic to determine the extent to which the findings align with current understanding. The results of this study will provide insights into the current state of job security in the technology industry. The conclusions will address the factors contributing to tech layoffs and assess the level of job security in the industry. Based on the findings, recommendations will be made to address the issues and improve job security in the technology industry. However, from the analysis, we found the following:

Tech companies have faced heavy pressure in the mass market - with the Nasdaq Composite falling more than 25% this year - while startups have had to deal with falling valuations and market slowdown poses risks to capital flows.
A brief recap of some of the notable layoffs and hiring freezes in 2022 as disclosed by Metinko, (2022) includes:

On April 18, mortgage technology company Blend Labs announced it would lay off 10% of its workforce, or about 200 positions, in a filing with the Securities and Exchange Commission. In late April, financial trading platform Robinhood, which went public in 2021, announced it would cut about 9% of its staff.

Also in late April, Netflix fired dozens of employees from the editorial site Tudum, just months after they were hired to build the site. The announcement came after quarterly earnings call in which the streaming services said they had lost 200, 000 subscribers and their shares plummeted. Amazon Chief Financial Officer (CFO), Brian Olsavsky announced during the company's April 28 earnings conference call that the retail giant has too many employees after hiring more as it prepares for workers to fall ill due to the coronavirus and the emergence of the Omnicron variant COVID-19.

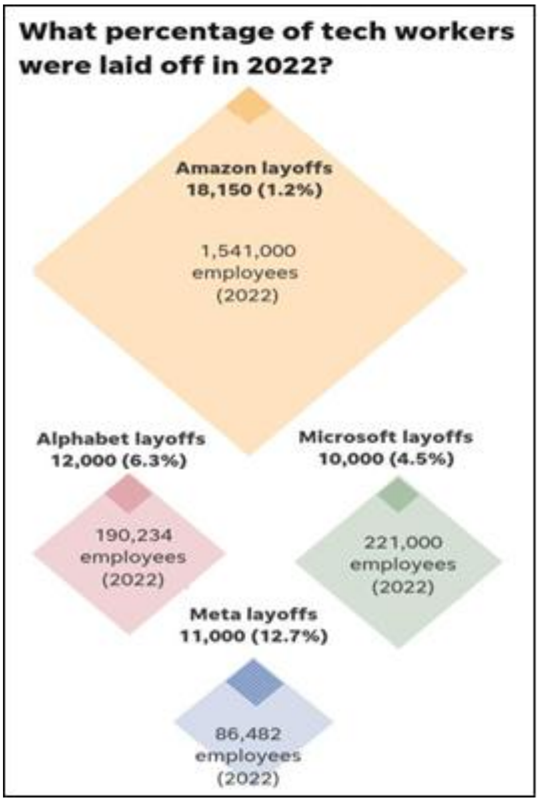
In 2022, multiple reports indicated that Amazon aggregator Thrasio would have an unspecified number of layoffs and replace its CEO. The $10 billion company announced the end of its original $1 billion Series D in October. Next up is financial platform Main Street, based in San Jose, California, which was valued at $500 million in 2021 and cut about 30% of its staff, according to a tweet from CEO Doug Ludlow.

On May 5, San Francisco - based On Deck, which helps founders navigate the startup world, announced it would be laying off 25% of its staff, or 72 employees. The next day, it was announced that several employees of the San Francisco - based collaboration tool startup Mural had been terminated, according to their LinkedIn page.

Also, in 2022, the Information reported that Miami - based Reef Technology, the operator of a ghost kitchen network that has raised more than $1.5 billion in funding, has laid off as many as 750 employees. In the same year, Uber said it would conduct more selective hiring practices in the future and said the hiring slowdown was a response to a "seismic shift" in the market. This was followed by news on Tuesday that online car dealership Carvana had laid off 2, 500 employees, many of whom were reported via Zoom.

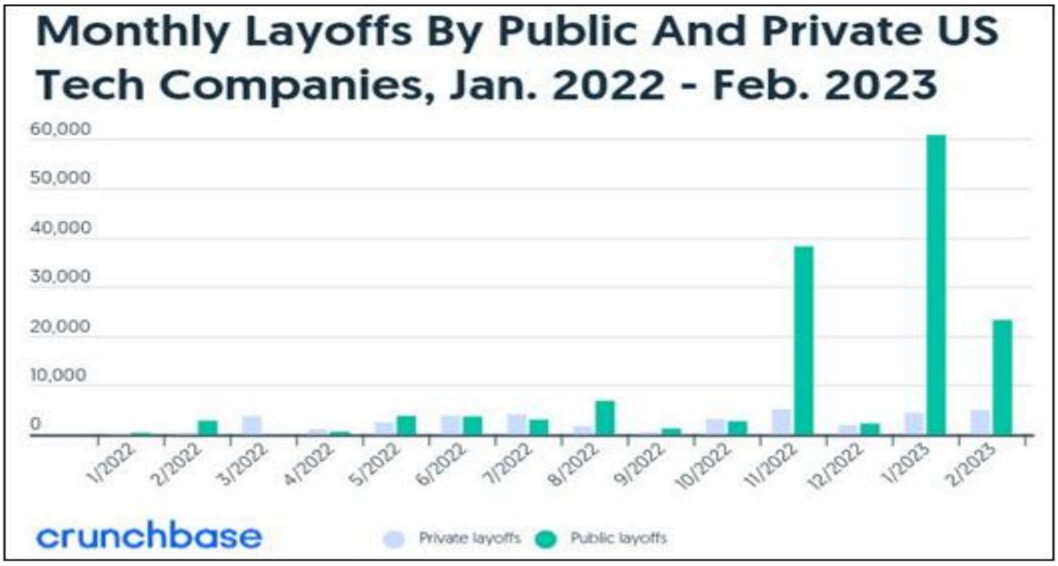
Finally, in 2022, artificial intelligence startup DataRobot, whose investors include New Enterprise Associates and Tiger Global Management, announced that it would lay off 7% of its 1, 000 employees, according to a report in The Information.

It should also be noted that, since 2022, about a quarter of the public companies that have announced layoffs have announced further cuts in the following months. Some, like Netflix, Twitter and Peloton, have made three rounds of layoffs in 14 months (Metinko, 2022).

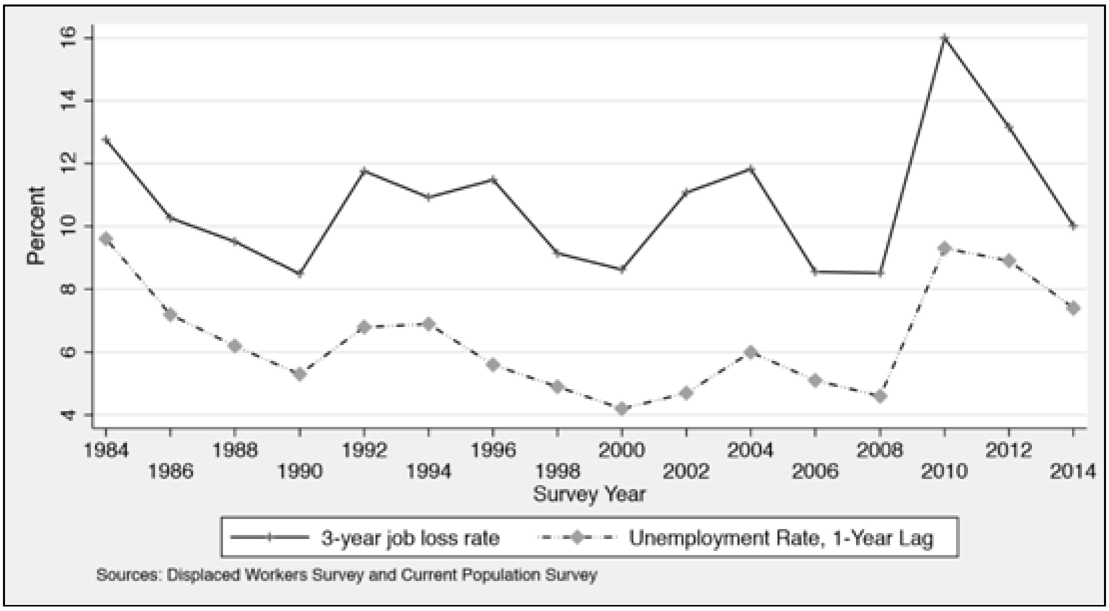


Source: Company Report, as cited in Buchwald, and Zarrcina, 2023).

The following diagram illustrates the level of layoffs in technological companies in the UnitedStates of America from 2022 - 2023:



Source: Metinko, C. (2022).



(Cited in Farber, 2020).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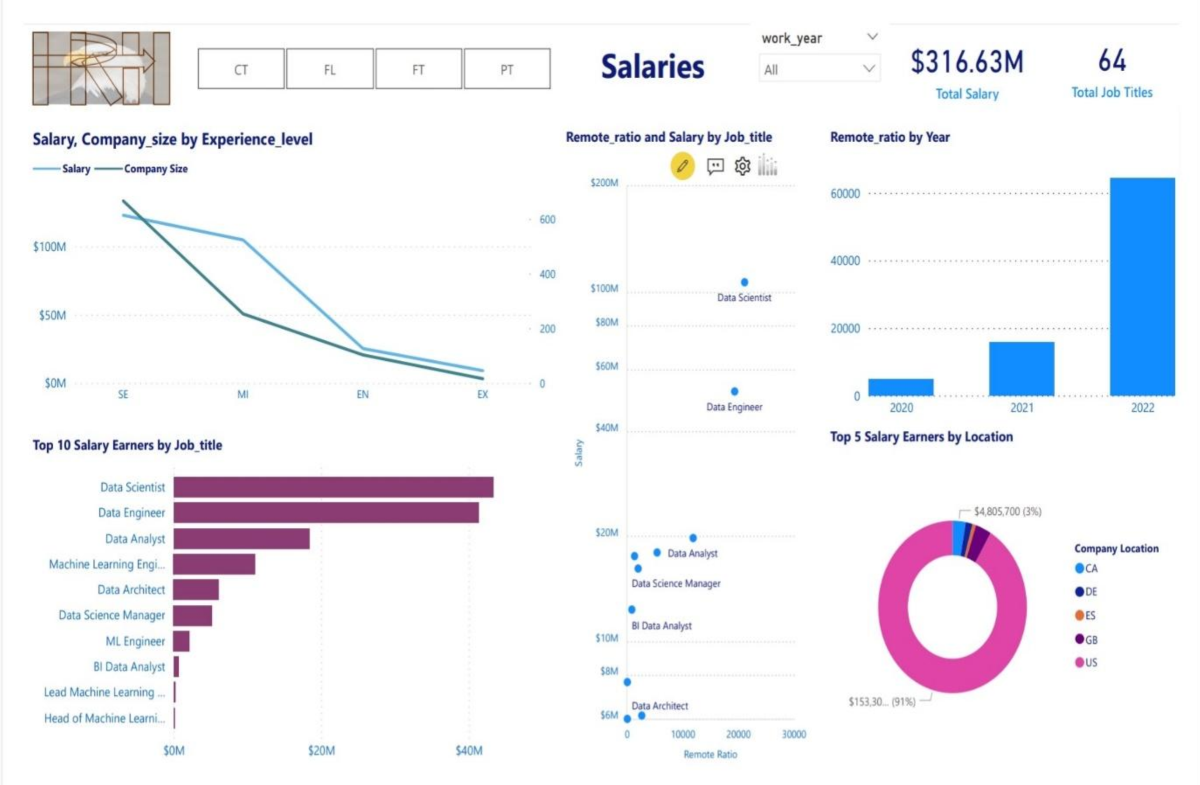
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Data Science Manager
BI Data Analyst
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Remote_ratio by Year
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Top 10 Salary Earners by Job_title
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Data Engineer
Data Analyst
Machine Learning Engi...
Data Architect
Data Science Manager
ML Engineer
BI Data Analyst
Lead Machine Learning ...
Head of Machine Learni...
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Top 5 Salary Earners by Location
$4,805,700 (3%)
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Company Location
CA
DE
ES
GB
US

Source: Data Visualization processed by Authors through Kaggle. com

5. Conclusion and Recommendations

The technology industry in the United States has been hit hard by the COVID-19 pandemic, leading to job losses and uncertainty for those employed in the industry. The United States has seen a dramatic rise in technology layoffs in recent years. Companies across the country have been forced to implement cost - cutting measures including downsizing their staff to remain competitive in the ever - changing market. This has had a major impact on the lives of those affected, leaving many without jobs and struggling to make ends meet.

Furthermore, the potential opportunities for new job roles and emerging technologies in the industry will continue to lead to the rise of artificial intelligence, machine learning, and data analytics is creating new job opportunities in areas such as data science and AI engineering. The shift to remote work is creating new opportunities for professionals with expertise in remote collaboration, communication, and project management. And the rise of cloud computing and virtualization is creating new opportunities for professionals with expertise in these areas.

Our recommendations for managing job security in the technology industry would be that continuous learning and upskilling can help individuals stay relevant and competitive in the job market. Networking and building professional connections can provide access to new job opportunities and insights into industry trends. Diversifying skills and expertise can help mitigate the risk of job loss due to technological advancement or industry fluctuations. And companies can prioritize employee retention and support, including offering training and development opportunities, and providing clear communication and transparency around potential layoffs or restructuring.

Fortunately, some steps can be taken to help those affected by technology layoffs. Remote work has become more common in the industry, with some companies announcing permanent work - from - home policies. The federal government has implemented programs such as the Emergency Unemployment Compensation, which provides additional weeks of unemployment benefits to those who have exhausted their state benefits. Additionally, many states have established job retraining programs that can help those who have been laid off to find new employment. Thus, technology layoffs in the United States are a difficult reality that must be addressed. However, with the help of government programs and job retraining initiatives, those affected can find the resources they need to get back on their feet. It is encouraging to see that steps are being taken to help those who have been laid off, and we are confident that with the right support, these individuals can find success in their future endeavors.

References

[1] Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. Psychological Science in the Public Interest, 16 (2), 40 - 68.
[2] Aral, S., & Brynjolfsson, E. (2021). COVID-19 and Remote Work: An Early Look at US Data. National Bureau of Economic Research, Working Paper 28242.
[3] Armani Syed. (2023). https: //time. com/6248866/google - alphabet - biggest - layoffs - 2023/

[4] Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2018). Key questions regarding work engagement. European Journal of Work and Organizational Psychology, 27 (1), 4 - 28.

[5] Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. The Quarterly Journal of Economics, 130 (1), 165 - 218.

[6] Buchwald, E. and Zarrcina, J. (2023). Massive tech company layoffs look ugly. But it may not be as bad as you think. Accessed from: https: //www.usatoday. com/story/money/economy/2023/02/07/tech - layoffs - 2023 - google - amazon/11135692002/

[7] Farber, H. S. (2020). Job Loss in the Great Recession and its Aftermath: US Evidence from the Displaced Workers Survey. Journal of Labor Economics, 38 (S1), S383 - S412.

[8] Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta - analysis of psychological mediators and individual consequences. Journal of Applied Psychology, 92 (6), 1524 - 1541

[9] Giunipero, L. C., Denslow, D., &Rynarzewska, A. I. (2022). Small business survival and COVID-19 - An exploratory analysis of carriers. Research in Transportation Economics, 93, 101087.

[10] Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: does time spent teleworking, interacting face - to - face, or having access to communication - enhancing technology matter?. Journal of applied psychology, 93 (6), 1412.

[11] Heibutzki, R. (2013). How Lack of Time Management Affects College Students. Seattle PI.

[12] Hertel, G., Geister, S., &Konradt, U. (2019). Managing virtual teams: A review of current empirical research. Human Resource Management Review, 29 (3), 334 - 350.

[13] Hetler, A. (2023). Tech sector layoffs explained: What you need to know. Accessible at: https: //www.google. com/amp/s/www.techtarget. com/whatis/feature/Tech - sector - layoffs - explained - What - you - need - to - know%3famp=1

[14] Jandaghi, Gholamreza&Mokhles, Ali &Bahrami, Hamid. (2011). The impact of job security on employees' commitment and job satisfaction in Qom municipalities. African journal of business management.5.

[15] Kaggle. (2023) https: //kaggle. com

[16] Metinko, C. (2022). Tech Layoffs And Hiring Freezes Appear To Accelerate. Accessed from: https: //news. crunchbase. com/business/layoffs - hiring - freezes - cameo - uber - facebook - thrasio/

[17] Owens, T. (2023). Tech sector layoffs - statistics & facts. (Accessed on 4 March, 2023).

[18] Shockley, K. M., & Allen, T. D. (2007). When flexibility helps: Another look at the availability of flexible work arrangements and work–family conflict. Journal of vocational behavior, 71 (3), 479 - 493.

[19] Vedentam, K. (2023). Tech Layoffs: U. S. Companies That Have Cut Jobs In 2022 and 2023. Available at: https: //news. crunchbase. com/startups/tech - layoffs/#: ~: text=More%20than%20102%2C000%20workers%20in, Ericsson's%208%2C500%2Dperson%20workforce%20cut