NUS National University of Singapore

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Google staff protesting against alleged union busting and layoffs outside the London headquarters on April 4. The company laid off 12,000 employees this year. PHOTO: REUTERS

High-tech job woes: Looking back at the dot-com crash and ahead to the future

The job market is poised to face increasing complexity in the future and building a support network within the industry is essential. **By Samer Elhajjar**

DURING a recent visit to San Francisco, I had a conversation with a Lyft driver about the rise of self-driving cars in the city.

He was anxious about its potential impact on his livelihood. "Driving is not just a job for me; it's the means by which I make a living and support my family. If my role becomes obsolete, what will happen to people like me? Will there be sufficient alternative employment opportunities to sustain us? These uncertainties haunt my thoughts, keeping me awake at night," he explained.

What struck me even more was that my friends in the high-tech field in Silicon Valley, long considered immune to disruptive AI, shared similar apprehensions. So, what's happening in the high-tech job market?

In recent months, global layoffs in the high-tech sector have multiplied.

According to the specialised site Layoffs.fyi, the global technology ecosystem has laid off close to 228,000 people to date this year. In 2022, the number was about 165,000. The 2023 tally included Meta's 10,000 employees, Google's 12,000 and Amazon's 18,000, among the notable names.

Layoffs during dot-com crash ring a bell

In the high-tech world, mass layoffs are not unfamiliar. The dot-com crash in the early 2000s rings a bell. Hit by an overvaluation of Internet-based companies and unsustainable business models, the technology industry in 2002 shed over 500,000 jobs in the United States alone. Data from the US Bureau of Labour Statistics showed that the unemployment rate for the IT sector jumped from 2.2 per cent in 2000 to 6.3 per cent in 2002.

Luckily, the pain was short. The recovery was slow, but by 2004, the hiring rate in the IT sector was back at pre-crash levels. The high-tech sector experienced stable growth for four years after 2004, a sharp contrast to the boom and bust period around 2000. What contributed to its revitalisation included increasing demand from sectors such as biotechnology and nanotechnology, and new financing programmes that funded a new generation of Internet startups.

Something's different this time round

The cycle of employment in the technology sector may be vastly different and more complex this time round. While the dot-com crisis was largely driven by a speculative bubble, the employment cycle is now driven by a multitude of factors. Things are getting harder to predict.

One major factor is political and economic tensions between China and the United States. A 2022 survey conducted by the US-China Business Council found that 87 per cent of companies said their business with China had been affected by US-China tensions.

The tensions mean that many companies need to adjust their operations and where they place their people. The adjustments could also lead to decreased talent flow between the two countries. When the high-tech industry is fragmented, there is less collaboration and knowledge sharing, and a dimmer light for industry innovation and growth.

The long-term effect

While employment in the high-tech sector bounced back two years after the dot-com crash, it may have been stifled by the unstable global economy for a long time to come.

When the economy is in a downturn, consumer demand for products and services decreases, resulting in reduced sales and lower revenues for the high-tech industry. As a consequence, companies will cut back on their workforce to reduce costs.

Moreover, firms facing economic instability may seek to conserve resources and reduce investment in research and development (R&D). That limits the growth of the high-tech sector.

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Banking turbulence

The turbulence of events that would shape the high-tech sector does not end there. Recent turbulence in the banking sector in US and Europe brought significant ripple effects to high-tech startups.

For instance, the collapsed Silicon Valley Bank was a major provider of venture debt, a type of financing that helps startups bridge the gap between their initial funding and their next round of venture capital. With a gloomier banking environment, high-tech startups are likely to face more financing difficulties. The situation does not bode well for employment in the high-tech sector in the long term.

AI becomes more powerful

Finally, while high-tech jobs have traditionally been considered to be more resistant to automation, AI technologies are evolving rapidly. Now they are capable of performing tasks such as data analytics, IT asset management systems, and network security. Earlier in May, IBM chief executive officer Arvind Krishna revealed plans to pause hiring for about 7,800 positions that could be replaced by AI over five years.

While AI can create new job opportunities, it can also displace certain roles. For example, in areas such as data analysis and software development, AI algorithms can automate certain tasks such as data cleansing, pattern recognition, and code generation, reducing the required workforce in some areas.

Unfortunately, the high-tech job market is poised to face increasing complexity in the future. Building a support network within the high-tech industry is essential. This may involve a collaborative effort between various stakeholders, including high-tech companies, governments, and employees. Help may come in the form of peer support groups, mentorship programmes, mental health resources, and professional development opportunities. Hence, even if the challenges of the high-tech market land strong blows, the support network can cushion the blows.

The writer is senior lecturer, Department of Marketing, National University of Singapore Business School. The opinions expressed are his own and do not represent the views and opinions of NUS.