Beat the Big Tech Blues

A CIO's guide to right-sizing business operations

Standing at the crossroads

The technology space is broad, fast-changing and, often, ill-defined. Its elusive nature is not surprising, given the blurring of platform and product category lines over many years. Hardware manufacturers have become software companies. Telcos have become digital service providers, and semiconductor firms have evolved into large-scale data processors.

All of this strategic land-grabbing has given rise to so-called Big Tech stocks that continue to dominate multiple marketplaces. But the ripple effects of digitization have also led to the emergence of multiplatform players like Uber, Netflix, Salesforce, Booking.com and PayPal, which, to an extent, have mimicked the path laid down by Big Tech.

In contrast, we now stand on the precipice of a minor U.S. recession, a cooling world economy and depressed consumer spending. Currency markets remain highly volatile and supply chains continue to be disrupted. The hottest word on Wall Street is no longer growth but discipline. And it's clear that Big Tech is listening.

Across the board, we see new investments being put on hold, product launches delayed, production output reduced and – most tellingly – employees laid off in the tens of thousands. To the outside world, these large-scale changes are unsettling. But inside the money markets, investors' fears are being calmed. They are getting what they want. They see that the major technology stocks are rightsizing themselves and prioritizing value over growth.

For the leaders of such businesses, especially their senior technologists, the focus has firmly turned inward to all the things that consume resources and generate revenue – human or otherwise. It's also given rise to a period of pause and reflection about the role of technology itself.

Globally, the volume of new applications has fallen over the past 20 years. Over the same timeframe, worker productivity flatlined to around 2 percent. That's food for thought if you're a CEO, CFO or CIO looking to manage down discretionary spending, instill discipline and protect stock value.

So where are you at this important crossroads? Are you able to pivot direction quickly and easily? Do you have the right technology strategy at play? To what extent are your IT resources working hard for the business? Can you be prudent and progressive at the same time?

Read on as we explore some of the key factors at play in any effort to streamline business operations after a prolonged period of largely unchecked growth.

A deal with the devil

Most data-obsessed businesses, especially those in the tech industry, long ago made a pact with end users. It read something like this: “Give us your data and we’ll make your life easier.” The entrepreneurial principle of “cheaper, faster or better – choose two” went out the window. Data was all that mattered, and so consumption of digital services exploded. Data capture was just a new form of land-grabbing. It worked and continues to.

Consequently, tech firms built or bought platforms and applications to collect, store, process and share data. Enterprises gorged on SaaS. But, in the process, they also became bloated – a patchwork quilt of suboptimal, disparate technologies. Behind the well-polished advertising campaigns, they were propping up these services with decaying bits of infrastructure. Decades of growth merely disguised the joints and the need to tackle them urgently.

The aggressive pursuit of data. The pact itself came with an unforeseen cost – technical debt.

Extracting signal from noise

The fact that Big Tech has a big problem with technical debt is antithetical to many outside observers. How can the world's biggest and most advanced technology businesses have a systemic problem with tech? Funds are limitless. Resources abundant. Expertise unparalleled. How can this be so?

All that may be true, but any CIO, CTO, CISO or IT operations leader will tell you that things move slower at the back end than they do at the edge of the network. SaaS is easy to buy. It's easy to spin up. It's easy to scale. It's additive and it's addictive. In contrast, it's difficult to upgrade, reconfigure and secure the corporate network in such a way that it can deal with the massive front-end bloat. Politically, it's also challenging to deal with a habit that has made the business rich.

But the call from the markets, shareholders and the C-suite is to exercise more discipline going forward. CFOs are actively looking to curb the level of discretionary spending and improve productivity. Coupled with this, regulators are demanding more transparency in how Big Tech firms handle data. Antitrust is the default position of those overseeing the industry.

This would be much easier to deal with if technical debt weren't such a big problem for hardware, software, telco and semiconductor businesses. Technology growth has enabled these enterprises to get closer to the customer, deliver services faster/cheaper and grow revenue per head. But the failure of back-end infrastructure to keep up has created enormous blind spots that are inhibiting business leaders' ability to identify which assets create wastage, inefficiency and corporate risk.

These are not ordinary IT estates. The sheer scale is massive and has no parallel in other industries. Hundreds of data centers, thousands of applications, millions of endpoints. The ability to separate inefficient, underutilized and vulnerable IT assets from those that bring true value is the major challenge facing Big Tech today.

But if you can separate the signal from noise in this complex web of technologies, you can quickly move from discover to act. With improved visibility of how the estate and essential services are performing, CIOs can hope to automate more and focus on the touchpoints that matter most. That's going to be vitally important going forward, especially for firms operating with downscaled engineering teams and fewer back-end specialists.

> **Key opportunities for Big Tech in 2023 include rightsizing cost structures through headcount reduction and greater operating discipline, increasing focus on profits and cash flow, leaning responsibly into new growth drivers and gaining market share during this tough macro period.**

Doug Anmuth
Head of the U.S. Internet team, J.P. Morgan

Beat the blues

A Modern DevOps and cloud are great examples of automation creating business outcomes using things like Infrastructure as Code (IaC). But, in many other areas, the management and control of technology assets are in dire need of transformation.

IT is often so focused on delivering direct business value that there isn't time to manage IT itself better. But this gets super-embarrassing for organizations when they are breached after someone forgets to do the basics of IT hygiene because they didn't ever have full visibility of all their assets.

Existing systems management and IT service management solutions are often part of the answer. But many of these systems often don't work properly or don't scale with the organization – a major problem for Big Tech. They are built on centralizing data, but data has gravity, and moving gigabytes of data around is inefficient and costly. And, crucially, they're not delivering on the promise of automation when they are being fed by error-prone manual data, fragile processes and/or disparate files that have to be imported.

The reality is that many large technology enterprises have rushed to deploy tactical point solutions that fix a specific pain point, not realizing that they actually just make IT management even harder by adding additional complexity and more IT infrastructure to power these many point solutions.

This situation has only gotten worse in recent times with increasing regulations and focus on cybersecurity. More and more point solutions have been deployed to fix issues; but these have just made the problem worse – adding yet further complexity and often distracting IT operations teams from managing the basics of the IT environment.

Other departments figured out a long time ago that it isn't worth spending time and money architecting and integrating lots of different separate point solutions if you can effectively manage your challenges with fewer strategic platforms.

Not only is the management of the IT estate easier, more automated and more effective, but teams realize additional benefits, such as:

1. Increased visibility of all hardware and applications
2. Real-time reporting on the status of assets status (today, not last week or last year)
3. Being able to drive proactive and automated actions from the data
4. Fewer silos across teams by having a single source of truth
5. Reduced corporate risk exposure by removing the network and application blind spots
6. The ability to take action in a collaborative manner across multiple teams
7. Ease of feeding data into other systems, such as the CMDB
8. Improved performance of networks, data centers and endpoints
9. Reduced infrastructure costs from technology consolidation
10. Lower operational burdens from managing multiple-point solutions

Walk the line

Tackling tech debt in the last mile (at the endpoint) is what Tanium does really well. We work with large-scale technology providers worldwide to tackle many of the business issues created by technical debt and the overall lack of network visibility. We help IT, security and risk teams get closer to a single source of truth for applications, technologies, data flows, and their lifecycles. And we do this for major players in the hardware, software, telco and semiconductor sectors.

Many of our senior executives have direct client-side experience of running teams just like yours, in situations just like yours. Mergers, acquisitions, security breaches, cyberattacks, business transformation – we've seen it all and, most important, have the playbook to help guide you through.