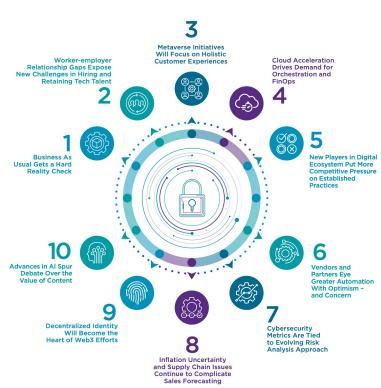
IT INDUSTRY OUTLOOK 2023: ASEAN

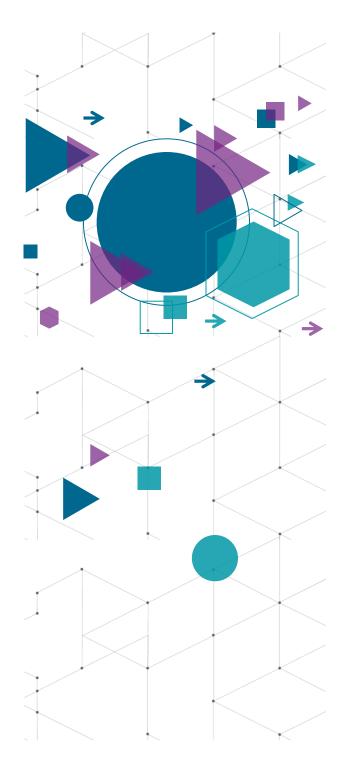
Heading into 2023, the signs of progress that appeared over the past year continue to blossom. The organizations that have made it through recent and ongoing turmoil are using their newfound resilience as a springboard into the future. The return to strategy predicted by CompTIA's IT Industry Outlook 2022 has become a reality for many organizations, and they are now focused on writing their next chapter.

Those new chapters hold a tremendous amount of potential. Spurred by global events, companies may decide to focus more effort on improving the world around them. Closer to home, there is potential for individual company growth. Organizations have more opportunities than ever to diversify their workforce, reach new customers and develop new products. Whether it is expanding current offerings or pivoting to a new business model, companies can build on lessons learned to reach new heights.

No matter which direction an organization may choose, technology will play a starring role in the story. Technology alone cannot solve all the world's problems, but it can accelerate solutions for those with the right vision. The technology industry may face future headwinds around ethical concerns or regulatory maneuvering, but there is no doubt that those hoping to make a difference can use technology to unlock the potential they imagine.



Trends To Watch 2023



INDUSTRY OVERVIEW

The importance of technology in our modern world means that the technology industry is a true force to be reckoned with. The sheer size of the industry makes it one of the dominant sectors in the global economy, and the rapid growth and rate of change within the industry make it a central player in developing business standards and regulations.

The impact of technology goes far beyond the core tech industry, though. While there are myriad opportunities directly related to digital product development or service delivery, there are countless more opportunities opening up around the world as technology influences every business and every industry vertical.

The amount organizations are spending on IT demonstrates the rapidly changing nature of technology. Gartner estimates that 2023 global IT spending will reach \$4.6 trillion in 2023, a jump of 5.1% over 2022 spending. The categories included in Gartner's estimate are traditional IT components: Communications services, IT services, devices, software and data center systems. As expected, the service categories are the largest pieces, as most organizations have built a foundational layer of computing and are now crafting new solutions on top of that foundation.

In addition to these traditional categories, emerging technology is driving additional spending. Data from IDC, which CompTIA has used in previous years, shows roughly the same level of spending in the traditional categories. IDC, though, adds a category of "new technologies," which includes technology such as internet of things (IoT), robotics and mixed reality. Spending on new technologies is expected to hit \$1.36 trillion in 2023, adding nearly 30% to the expected spending on traditional items. One final note on spending projections: The current economic chaos, including inflation and relative strength of global currencies, is impacting forecasting models as much as it is driving uncertainty for businesses. Actual spending may fluctuate more in 2023 than in previous years.

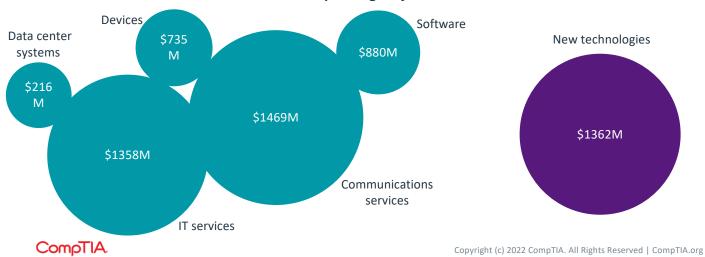
Industry Outlook Is Largely Positive

Average rating for health of tech industry, with 1=Terrible and 10=Excellent



Given both the direct and indirect impacts of technology, it is no surprise to see positive sentiment toward the industry. Among technology firms in each of the six different geographic regions surveyed by CompTIA, the average rating for the future prospects of the overall technology industry skewed toward the higher end of the scale. Even with economic uncertainties and societal issues, the tech industry remains a robust choice for business growth and career advancement.

All in all, the impact of technology today goes far beyond the technology itself. Technology is deeply ingrained into business activity and daily life. There is no question that there are some negative elements, especially as technology applications reach massive scale and trigger unintended consequences. However, there is also no question that there are many positive outcomes, and a progressive approach to technology is a critical factor for sustained success.



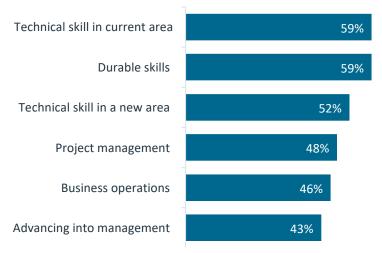
Global IT Spending Projections 2023

CAREERS IN TECHNOLOGY: BUILDING STRATEGIC SKILLS

With technology now acting as a critical component in business strategy, it is in a company's best interest to integrate their IT specialists more deeply into operations. Of course, with most organizations making this move, the demand for skills is outpacing available supply, meaning that opportunities are open not only within an IT pro's current employer but also in other firms that may provide higher pay or better flexibility. Over the past year, technology job postings have been plentiful and tech unemployment has been incredibly low. There is no reason to expect a huge change to the situation in 2023.

This high-demand environment is commonplace today, but it is a relatively new phenomenon for IT professionals. In the early days of enterprise technology, technical skill was not needed by most organizations. Computing was reserved for the largest companies with the biggest budgets. As technology became more widespread, the IT function was largely viewed as a cost center, and IT pros were often constrained in both resources and career progression. In today's environment, companies are viewing IT through a strategic lens and increasing both their appetite for technology and their investment. This then leads to a high demand for skills creating a broad range of career options, which is the top reason for optimism by a wide margin.

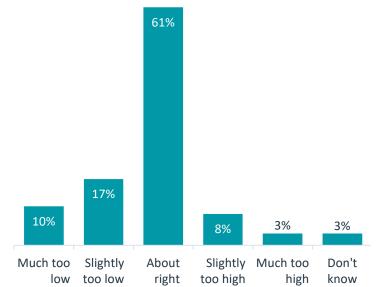
Focus Areas For Career Growth



While intent to hire is still strong (34% of companies expect to hire for technical skills in 2023), internal training remains the dominant option for closing skill gaps (74% of companies expect to train existing employees in 2023). In considering workforce development options for the next 12 months, companies may need to invest more heavily in certain components. A rigorous skill assessment can pinpoint the specific skills needed to advance corporate objectives, and it can also define training options that can target those skills. Getting closer to the actual training program, businesses can expand the types of offerings that are provided or subsidized in order to ensure the best pathways for individual learning styles.







These investments for workforce development are obviously part of the larger technology budget, which appears to be stabilizing at adequate levels for most companies. As expected, the perception of technology budgets skews toward the insufficient end of the scale. Overall, though, the technology budget is healthy for most organizations, and it is moving in the right direction; 90% of companies believe that their technology budget in 2023 will be the same or higher than it was in 2022.

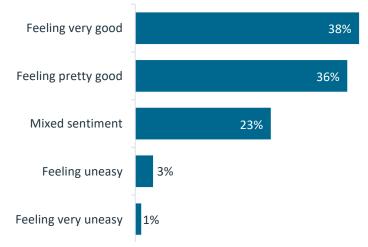
At first glance, it may seem strange that any IT professionals would believe that the technology budget is too high. While there are only a small number of individuals in this category, it is worth exploring the sentiment. Given that this viewpoint is slightly more prevalent in larger firms, this may be a statement on balance. In an environment where digital transformation is held up as a new business imperative, organizations may begin viewing technology as a cure-all, opening the wallet for advanced technology purchases without making corresponding investments in best practices for usage or restructuring of business flow.

This may be exacerbated by business units making their own technology investments. When asked to consider how the overall technology budget was divided between the IT function and business units, IT professionals in CompTIA's survey reported a nearly even split, with a slight lean toward business units. Technology procurement by business units is not necessarily a problem (and also not exactly something that can be avoided), but it does require close collaboration. A particular business function may be closest to the situation and best able to define functional requirements, but areas such as cybersecurity and integration likely fall outside the technical expertise of business unit employees.

THE BUSINESS OF TECHNOLOGY: FORGING AHEAD IN TOUGH WATERS

Much like IT professionals, companies in the business of technology (aka the channel) are starting to think bigger again, rekindling some of the strategic initiatives and aspirations that may have been put on the back burner during the extended pandemic. Yet there is trepidation as well, with many channel firms of all stripes worried about continued inflation, supply chain issues and the omnipresent threat of an economic recession. It's a paradoxical time as we look ahead to 2023, one in which companies are at once ready to forge ahead with new investments and innovations yet must do so with a dose of caution attributable to the uncertainty of the business landscape.

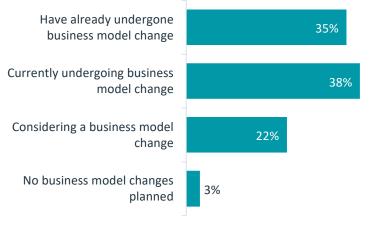




One of the markers that channel firms will be looking for in the year ahead is growth potential of their own business in relation to the tech industry at large. Many are bullish that growth potential is strong. Sixty-one percent of respondents said they expect their own revenue and profitability numbers in 2023 to exceed those of 2022 if the tech sector flourishes. A more cautious 30% of respondents said they expect stable results on par with the year previous, even if the tech sector does well. And finally, roughly 4% said they still expect a decline in revenue and profitability even if the tech industry performs on the positive side of the economic equation.

Business models are changing for the channel as firms consider different paths for the future. For years, we have been hearing about and witnessing a slow march from traditional reseller of hardware to full-portfolio solution provider to managed services provider. That is very much still happening. But the drumbeat for business model change seems louder today, largely driven by a digital-everything economy, cloud computing, hardware commoditization and margin erosion, and direct procurement competition from online marketplaces and vendors.

Incidence of Business Model Change for Channel Firms



Business model change can mean many different things to many different channel firms. A small tweak such as adding a vertical specialty, for example. Or a major transition from a product reseller to a company that does pure IT consulting. Whatever it happens to be, most channel firms today report some degree of business model change or active consideration of starting one.

What do these business model changes look like? For the most part, they are variations on a theme: The move to recurring revenue and services. But the flavors are nuanced. Here are the top five business model shifts respondents reported:

- Product reseller to MSP selling everything from infrastructure to business applications to emtech services
- 2. Transition to a combination of different business models
- Product reseller to traditional MSP selling infrastructure services (devices/network)
- 4. Product reseller to cloud services provider managing SaaS and other cloud-based workloads for clients
- 5. Transition to an IT referral or consulting business

This journey to recurring revenue and, most importantly, services has been ongoing. But today's realities have elevated the urgency of moving faster. More customers buying directly from online marketplaces has many in the channel scurrying to find their competitive play when they no longer own the initial transaction. That play takes the form of pre- and post-sales services, including work around integration, cybersecurity, compliance and ongoing management of the customer environment.

