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Insights on 2023

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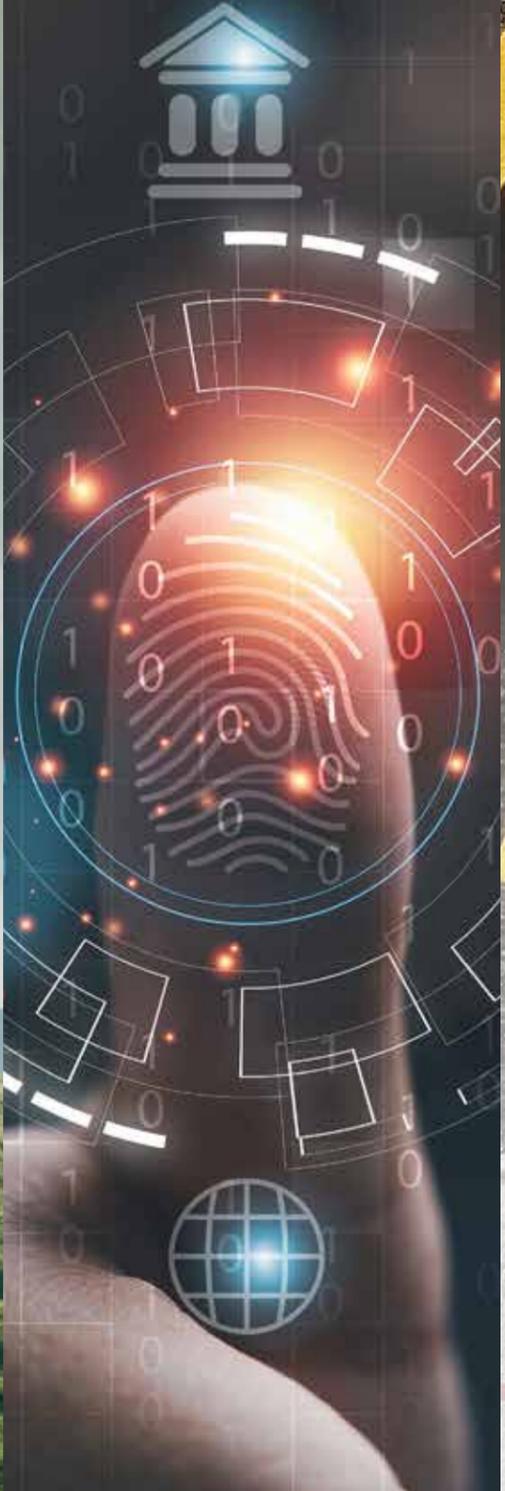
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Editor's note

The first few weeks of 2023 are looking a lot like the last few months of 2022, including ongoing tech layoffs, geopolitical turmoil, and economic uncertainty. No surprise there given the magnitude and momentum of those issues. They will likely dominate the overall IT and business environment for the rest of the year and beyond.

This year's surprises will come from the specific challenges that hit closer to home for IT professionals and digitally-driven organizations. For this issue of Digital Life, we take a closer look at the challenges you'll encounter in 2023.

In "Anticipating the E.U.'s AI Act," John Donegan covers the European Union's AI Act and its expected impact on AI systems. The AI Act is still on the horizon, but companies will soon begin proactively adjusting their AI models to comply with this legislation.

Although the AI Act won't be enforced until 2024 at the earliest, its passage will send shock waves reverberating throughout the tech world. John focuses on AI ethics by design, effective model governance, and the need for explainable, transparent AI systems.

Samudhra Sendhil looks at AI from the perspective of content creation in "AI-generated art: Will it enhance or replace human talent?" Sam notes that AI has increasingly been used as a tool for creating art, from music and visual art to poetry and storytelling.

In her article, she discusses the ways in which AI is being used in the creation of art, how organizations can adopt AI to increase efficiency, and the implications of AI-generated art for artists and enterprises at large.

Sam also considers the potential of AI to revolutionize the creative process, as well as the concerns that have been raised about the role of humans, or rather, the lack of, in the creation of art, and other ethical concerns.

"Technology leaders, here's why you should prioritize sustainability" is Priyanka Roy's investigation into the environmental impact of IT. Earth is slowly but surely inching towards climate doom if we don't take immediate steps to curb the impact of global warming and climate change.

While technological innovations themselves—think AI and ML—can have negative impact on the climate, they are

also in a unique position to control and lessen the damage we've done to the planet so far.

To that end, Priyanka explores ways that organizations can leverage the power of sustainable technology to become eco-friendly themselves and also make the world a cleaner and greener place.

Naveena Srinivas invites us to rethink identity and access management in "Making IAM easier and more secure: The power of identity fabric." Traditional IAM practices often rely on static, one-size-fits-all approaches to authentication.

Meanwhile, identity fabric takes a more dynamic and holistic view of identity, incorporating a wide range of personal and social factors to create a more comprehensive and accurate view of an

individual's identity.

Thanks to its enhanced security, improved user experience, and ability to protect personal data and meet regulatory requirements, identity fabric is poised to revolutionize the way we think about identity management.

And in "2023 workforce strategy: Convictions over conditions," I encourage hiring managers and company leaders to look beyond the mixed signals coming from today's IT job market. Instead, they should look to their organization's values and convictions when making workforce decisions. By relying on enduring values instead of volatile conditions, you can provide your employees with a degree of stability during uncertain times.



Brent Dorshkind
Editor, ManageEngine

Anticipating the E.U.'s AI Act

John Donegan

Enterprise Analyst, ManageEngine

The dangers of ungoverned AI systems and unchecked algorithmic decision-making have been a concern for many years. In an effort to innovate and be first to market, companies sometimes operate without proper guardrails in place. Unfortunately, the dangers of unchecked AI models are real, and if history is any indication, we cannot count on most technology companies to self-regulate.

AI regulation is most assuredly coming, and like we saw with data privacy legislation (GDPR), the European Union will lead the way. The trouble, of course, is that E.U. legislation is years away. First published in April 2021, and set to become law in 2023, the E.U.'s AI Act will not be enforced until [late 2024, at the earliest](#). To call it a work



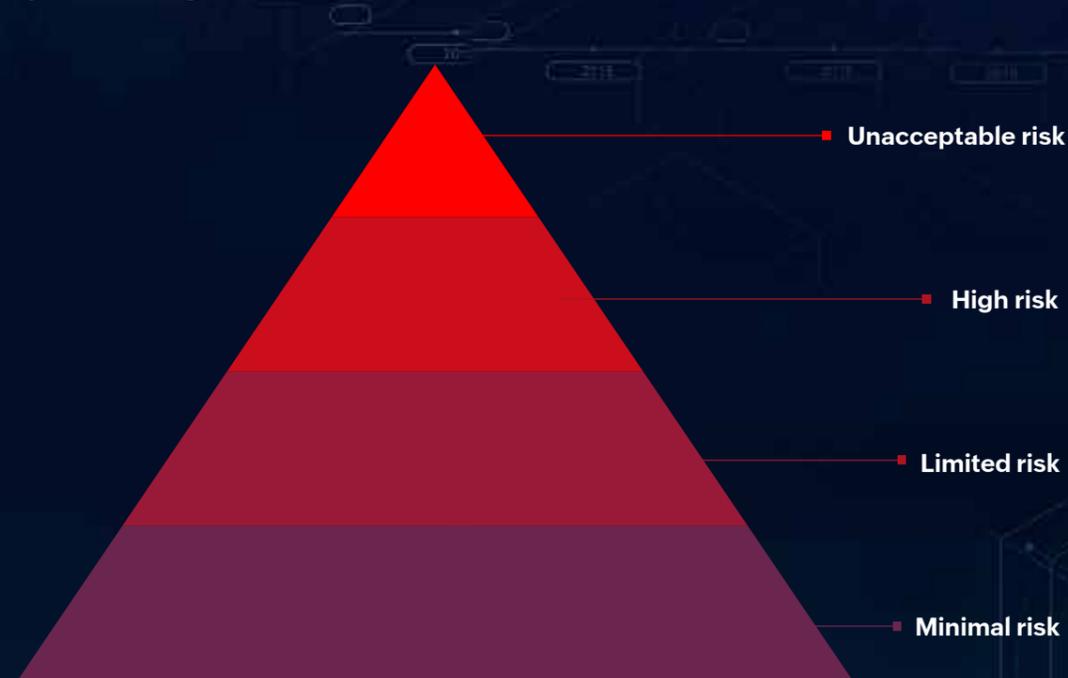
in progress is an understatement, as there have already been over [3,000 amendments](#) to the initial draft.

Although legislators are hashing out the details right now, we know that the legislation will regulate AI models based on the level of risk they pose.



Risk and the AI Act

Under the AI Act, AI models are deemed to have one of the four risk levels: unacceptable, high, limited, or minimal.



Unacceptable risk - Models that endanger the safety, well-being, and personal rights of individuals will carry the unacceptable risk designation. Prohibited by law, these unacceptable risk models include AI systems that “use subliminal techniques” to manipulate users’ behavior in ways that cause either physical or psychological harm. Other examples include systems that facilitate “social credit scoring” by governments, and models that exploit a user’s vulnerability due to a mental disability.

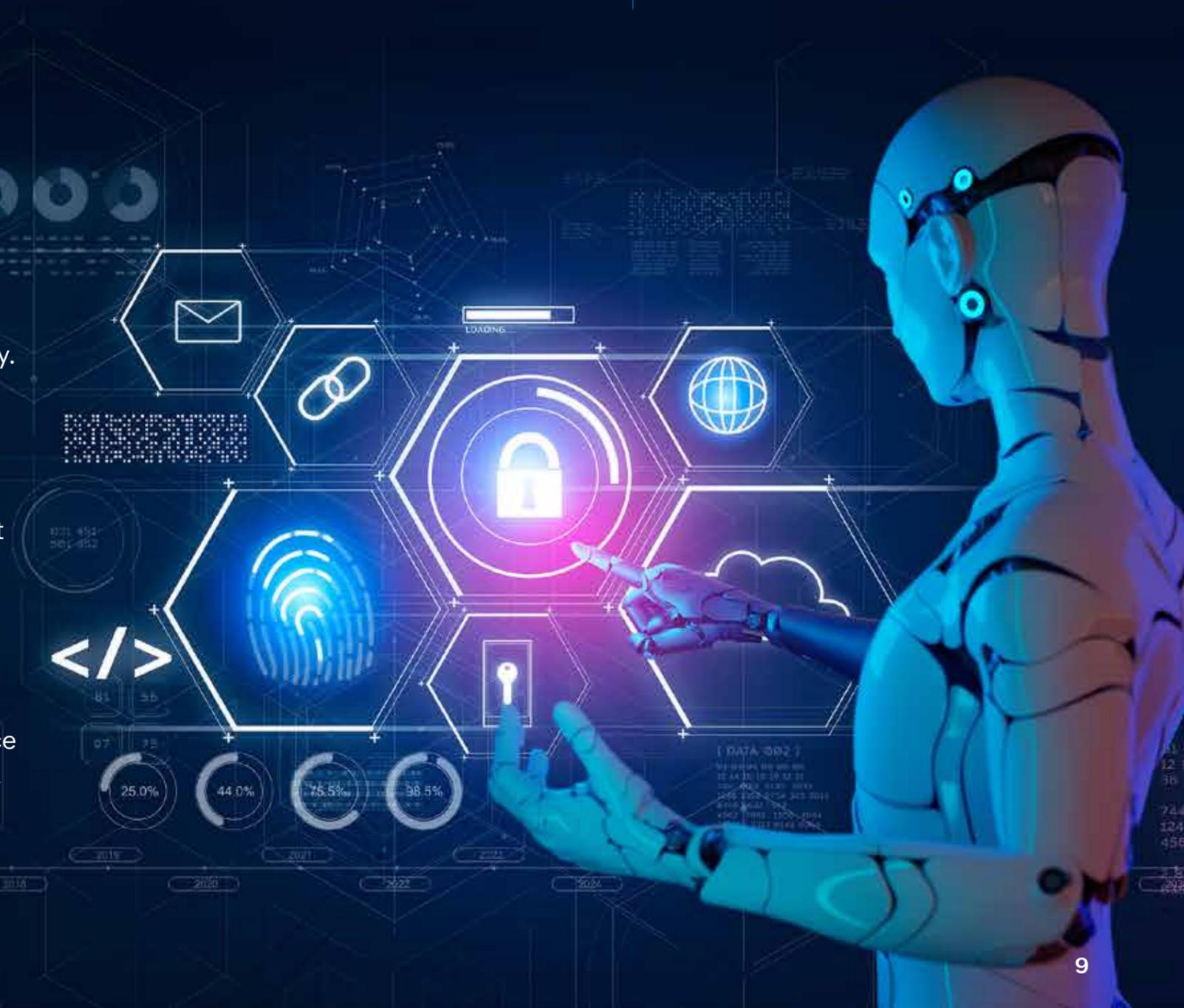
According to article 5(1)(d) of the [AI Act draft paperwork](#), most (but not all) AI systems that collect “real-time”

remote biometric data in publicly accessible spaces would also fall within the unacceptable risk category.

High risk - Examples of models that carry this designation include some AI used by law enforcement, critical infrastructure, or employment practices, such as hiring decisions. These models are not illegal, per se; however, before they are allowed to run, the models must undergo risk assessments, proving themselves to be robust, secure, and accurate. Once these high-risk models are approved, the companies using them must register them in an EU database and report any incidents that occur.

Limited risk - As currently defined, limited risk AI models include relatively innocuous services, such as chatbots and certain forms of [synthetic media](#). According to the European Commission, most “AI systems intended to interact with natural persons” will pose a limited risk, and companies will solely be required to make sure users are aware that they are interacting with artificial intelligence.

Minimal risk - Many AI-based video games and spam filters should fall under this category. If a company’s AI model is deemed to be low or minimal risk, it doesn’t fall under the purview of the AI Act and the company is in the clear.



Consequences for violators

For companies that violate the AI Act, ramifications will be similar to GDPR violations. As of now, serious breaches are set to result in fines as high as €30 million, or 6% of global revenue. Also, much like GDPR, the new AI law will apply extraterritorially. If the output of an American company's AI system is used anywhere in the E.U., that company can be held liable.

Most recently, on September 28, 2022, at the request of the European Parliament, the Commission submitted a Proposal for an AI Liability Directive (AILD). This directive proposal seeks to lay down some legal groundwork for the civil liability for damages caused by AI systems. Barristers across the pond are still tweaking the legalese, but the fact is: AI legislation is coming.

Many companies are woefully unprepared

According to [FICO's 2021 State of Responsible AI report](#), many companies will have a long way to go

to get their AI models up to par. The questionnaire, which reached out to 100 AI-focused leaders across the globe, revealed disturbing trends.

Of course, explainable AI will most certainly be a component of the legislation coming down the pike. This appears to be an issue, as **65%** of respondents say they are unable to explain how specific AI model predictions or decisions are made.

Equally alarming, **68%** say the processes their organizations use to ensure AI projects comply with regulations are "ineffective". These statistics do not bode well.



In regard to audit trails, the authors of the FICO report write, "What's more, 26% say their model development audit trails are patchy in places, and 4% admit to not maintaining standardized audit trails at all. This means there are AI models being used in businesses today that only the data scientist who originally coded them understand." Clearly, this is a problem.

Looking forward

By the time the AI Act passes through the European Parliament, in all likelihood, there will be a [patchwork of U.S. state](#) addressing artificial intelligence models. At that point, there will undoubtedly be calls for a federally mandated AI law, just as there have been calls for a [federal data privacy law](#) after GDPR forced the issue. No matter what, most companies that utilize AI-based systems will need to make changes

to their current operations, and savvy companies will begin making adjustments sooner rather than later.

In the future, consumers are going to be far more likely to seek out companies that have transparent AI models. Moreover, the explainability of algorithmic decision-making will continue to be important—to consumers and regulators alike. Ensuring that your company's AI systems' decision-making processes are transparent and explainable will be vital.

Historically, the main concerns surrounding AI models—aside from accuracy, transparency, consistency, and explainability—have been 1) biases seeping into data sets and 2) the use of unethically sourced data. These issues will continue to be top of mind for designers of AI tools.

Ethics by design and effective model governance

With the AI Act approaching, prudent companies with AI systems will preemptively adjust and monitor

their tools. Ethics by design—the incorporation of ethical guidelines and [recommendations](#) at the implementation stage of AI systems development—will be key.

Moreover, developers will increasingly ensure that the data feeding the AI models is unbiased. As an aside, this is actually one bright spot in the FICO study; nearly 59% say they do look out for biases seeping into their models. At any rate, all real-world data must be scrutinized before it's used in the training of AI models.

Lastly, it's important to have knowledgeable, attentive employees continuously monitoring the models, preventing model drift, ensuring regulatory compliance, and guarding against adversarial AI and data poisoning.



In summary

There is always a delicate balance between government overreach (curbing innovation) and necessary government intervention (holding companies accountable and protecting human rights). In the case of AI—and user data privacy—industry self-regulation is implausible, which is why the European Commission has gotten the AI regulation ball rolling.

Given that we are only a couple of years out from the AI Act's enforcement, companies will soon

begin proactively adjusting their AI models to comply with this legislation. Generally speaking, as long as one's AI systems are ethical, unbiased, well-governed, and explainable, no major overhauls should be necessary. However, if the FICO study is truly representative of all the entities currently using AI models across the globe, a lot of companies certainly have adjustments to make.





AI-generated art: Will it enhance or replace human talent?

Samudhra Sendhil
Enterprise Analyst, ManageEngine



Would you have ever considered imagination and creativity as being traits of a machine? If you used to feel like the “robots are taking over” dilemma never really applied to your field of work, now might be the time to rethink.

Humanity once believed that artistic expression was an intrinsic human trait. That every piece of art ever created, be it a mindless scribble or a panting where every stroke of the

brush is meticulously calculated, was something that is unique to the artist.

We also believed that one of the greatest limitations to any machine-generated content was the absence of creativity. Artificial intelligence (AI) was typically thought about in the form of streamlining and automation, and it was best suited for mundane tasks. In 2022, AI is rapidly disrupting the playing field for artistic and non-artistic work, and it is doing so on its own.

To put the creativity of AI to the test, we came up with a short experiment. First we asked OpenAI, the widely popular AI-chatbot, to generate a prompt that would be used to create AI artwork.

Here's what it provided:
“A golden retriever in a field of wildflowers.”

Next, we took this sentence to Midjourney, the AI-art generating Discord bot, which yielded us this result:





the dataset is collected, the model is typically trained using a type of ML algorithm called a generative adversarial network (GAN), which involves two separate neural networks: a generator network and a discriminator network.

The generator network is responsible for generating new, original content based on the training dataset, while the discriminator network is responsible for evaluating the generated content and determining whether it is real or fake. The two networks are trained together, with the generator network trying to produce content that is realistic enough to fool the discriminator network, and the discriminator network trying to become better at identifying fake content.

Over time, the generator network becomes increasingly skilled at generating new, original content that is similar to the examples in the training dataset. This allows the model to create new, creative content on its own, without relying on explicit instructions or constraints from a human.

Generative AI models

Generative AI models use machine learning (ML) algorithms to create art, music, text, and even computer code. These models are trained on example datasets, then are tasked with generating new content based on that learning. The major ML model behind this is called neural network architecture, which is designed to mimic the way the human brain processes information.

When training a generative AI model, the first step is to collect a large dataset of examples that the model can use to learn from. Once

Fearing creativity or change?

Ever since AI-generated artwork became mainstream over the past year, its ethics have been highly debated, with some artists expressing concerns about traditional artistic endeavours becoming devalued. AI-generated artworks can be considered creative because they are generating

novel ideas and compositions that have not been seen before. However, there's also the argument that these artworks are not truly original because they are based on patterns that already exist in the training data. The ethics of AI art is further put into question with stories of training datasets including examples from artists who have not consented to their art being used in this manner.



Adobe recently [permitted AI-generated artwork to be sold on their platform](#), and a Colorado-based art competition [awarded first place to an AI-generated painting](#), sparking controversy over AI-art hastening the “death of creative jobs.”

Despite the ethical concerns, AI-art is fast rivalling human-made art. However, it is crucial to differentiate fear and ethics when it comes to discussing AI-art. The fear that surrounds AI-art could be a culmination of technological advancements and availability of AI-assisted tools beginning to redefine the role of AI in society.

One of the major arguments against AI-generated art is that it lacks creativity, uniqueness, and the human touch (which is a nebulous quality that adds to the depth, complexity, and emotional impact of art created by humans).

Then there's the fear that we feel when it comes to cultural changes. With considerable technological shifts, we experience a plethora of anxieties and trepidations. When the telephone was first invented, the link between sight and sound was broken, causing many to believe it was a tool of the occult. When computers began to automate operations, it threatened the continuity of manual work as we know it.

Technological changes can make us feel like we've lost control over our expertise and can even affect our sense of self-determination. When change is imposed on us by an external agent, it can be especially difficult to maintain our sense of agency. Be it something as simple as a change in title, tasks, or even routine, change can often be a source of uncertainty, anxiety, and stress.

However, given that change is now a constant aspect of our professional lives, it is essential for employers to have the competency to handle change for both their teams and the organization as a whole.

Effect on organizations

AI is set to add about

13 trillion USD

to the global economy by 2030.

The advancement of AI is occurring beneath the surface, enhancing the capabilities of current technology and enabling more effective utilization of data collected by enterprises. This progress has resulted in significant developments in ML, computer vision, deep learning, and natural language processing (NLP)—all making it simpler to incorporate an AI algorithm layer into software or cloud platforms.

For organizations, they can offer their employees resources to make their adoption of generative AI models

easier. To begin with, employees can be offered training and resources to understand the basics of AI-based art and how it can be used as a source of inspiration. Leaders should also clearly communicate the goals and expectations for the use of AI-based art within the organization. This could include establishing metrics for success and setting benchmarks for progress. Most importantly, leaders should encourage a culture of continuous learning within the organization to ensure that employees are staying up-to-date with the latest developments in AI-based art and can adapt to new generative AI technologies and techniques as they emerge.

AI-art should be used with respect for the art and creative process. This means considering the potential impact of AI-art on human artists and ensuring that the use of AI does not

diminish the value or significance of human-created art. AI-generated art and human art can inspire and influence each other, leading to the development of new styles and techniques. Human artists may be inspired by the unique visual styles and patterns generated by AI-based art, and incorporate them into their own work. Similarly, AI-based art may be influenced by the styles and techniques of human art, leading to the development of new algorithms and ML models.

Finally, as with any technology, it is important for organizations to consider the ethical implications of using AI-art and to ensure that they are using it in a responsible and respectful manner. If organizations are using AI-art to generate designs or artwork, they should ensure that they are not infringing on or unfairly profiting from the intellectual property of others.

AI-generated art can be an asset for organizations and it is important to use AI-art with care and consideration to ensure that it is used ethically, accurately, and respectfully.



Technology leaders, here's why you should prioritize sustainability

Priyanka Roy

Senior Enterprise Evangelist, ManageEngine

Billions across the globe are feeling the enormous impacts of climate change. Whether it is deadly heatwaves sweeping across the Indian subcontinent, terrible blizzards bringing life in North America to a standstill, or devastating droughts ravaging Europe, the impacts of climate change are varied and seemingly ceaseless. In such conditions, it is our collective responsibility as individuals, communities, organizations, and countries to try to undo the damage we've caused to the planet.

As powerful as government-led initiatives can be, organizations too are in a unique position of power to bring about significant improvement to the future of our climate.

“

Sustainable technology is a framework of solutions that increases the energy and material efficiency of IT services; enables enterprise sustainability through technologies like traceability, analytics, renewable energy, and others; and helps customers become more sustainable through apps, software, marketplaces, and more.”

Source: [Gartner](#)

This means that organizations should not only look at achieving sustainability of internal IT operations but also focus on enabling sustainable outcomes using technology.



Now the first question that'll probably come to your mind is, "Why should my organization put in the effort to incorporate sustainable practices? What's in it for me?" Here's the interesting part. Sustainable technology not only forms a crucial aspect of the environmental, social, and governance (ESG) framework of an organization, but it can also be a lucrative investment for clients, investors, and future employees. Leaders can boost faith in their businesses and earn goodwill by highlighting their vision of incorporating sustainable technologies into their organizations.

Environmental sustainability is thus driving boardroom goals and consumer values. [Gartner](#) predicts that by 2025, 50% of CIOs

will have performance metrics for IT sustainability. Additionally, a [Deloitte survey](#) found that 98% of consumers believe companies have a responsibility to make the world a better place, and 35% of executives believe consumer attitudes push companies towards sustainability more than stakeholder demands.

Business leaders face increasing pressure to lead climate sustainability, particularly in achieving net-zero carbon emissions (emitting no more carbon than is removed from the atmosphere). Leaders are expected to deploy technology that minimizes the environmental impact and think of ways technology can help build innovative methods of achieving sustainability.



Carbon emissions are mainly classified into three categories:

Scope 1 emissions:

These are the greenhouse gas (GHG) emissions that a company directly makes, like while running its boilers, HVAC systems, and vehicles.

Scope 2 emissions:

These are the emissions an organization indirectly makes, like from the electricity it buys for its buildings.

Scope 3 emissions:

These are emissions for which a company is indirectly responsible across its value chain, like from its suppliers and the use of its products. When it comes to the magnitude and extent of impact, scope 3 almost always trumps the other two.

Building a sustainable plan

The first step in creating a sustainable development plan for your organization is taking stock of where you stand at present. [Your current sustainability](#) index can be based on metrics like your energy consumption, product recycling rate, and carbon footprint. In fact, since [The Paris Agreement](#) was signed in 2015, many regulators now demand disclosure requirements as part of an overall approach towards net-zero emissions by 2050.

How you [measure your future sustainability](#) depends on the impact of the new technologies you're implementing. Many new technologies have hidden costs that are easy to miss. For example, AI is all the rage right now and has the potential to create immense value for businesses, whether through providing highly personalized recommendations or detecting potential scams. However, good AI systems process immense amounts of data at a quick rate, which increases a company's energy consumption.

Similarly, even though electric vehicles are more eco-friendly, the manufacturing of their batteries can be quite damaging to the planet as they are made up of raw materials, like cobalt, lithium, and rare elements, that have been linked to grave environmental and human rights concerns. This is why it's important to evaluate the product's entire life cycle from production to disposal in order to fully gauge the environmental impact of new technologies.

The Paris Agreement

[The Paris Agreement](#) is a “legally binding international treaty on climate change.” It was adopted by 196 parties in Paris on Dec. 12, 2015 and went into effect on Nov. 4, 2016.

“Its goal is to limit global warming to below 2, preferably 1.5 degrees Celsius, compared to pre-industrial levels. To achieve this long-term temperature goal, countries aim to reach global peaking of GHG emissions as soon as possible” to reach a climate-neutral world by 2050.

“The Paris Agreement is a landmark in the multilateral climate change process because, for the first time, a binding agreement brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects.”

CIOs can play a crucial role in making the measurement of sustainability easier by improving data quality, accessibility, and traceability.

They can orchestrate the process of gathering information related to key sustainability parameters as it involves collecting data from multiple systems across different departments. CIOs should monitor, manage, and analyze data collected from all internal departments and evaluate them based on their sustainability goals to ensure that the goals are being worked towards or are already met.

Technology can aid sustainability

Once you've measured your present sustainability index, you can then focus on how to use new technologies sustainably. CIOs should optimize their existing

processes and create integrated systems, both internal and external, to measure and reduce the organization's waste and carbon footprint. These days, companies manage pretty much everything, from their supply chains and finances to their personnel, with the help of technology. So there's no reason they can't manage sustainability through technology as well.

Sustainable tech goals include the reduction of scope 2 and 3 emissions and greener approaches to managing IT, like migrating to the cloud, using energy-efficient IT infrastructure (such as hardware and data centers), and following data center best practices to minimize cooling and energy costs. Businesses should also look at adopting automation to improve the efficiency of operations and using advanced analytics to get insights into how their existing resources are performing.



Did you know?



Mitsui O.S.K. Lines uses AI-powered models to improve shipping efficiency within the maritime industry.



Dubai Electricity and Water Authority uses IoT and digital twins to create smart building management solutions that use 50% less water.



IKEA publicly shared its Circular Product Design Guide to assist others in promoting circularity.



BBVA's tech-enabled financial services products include carbon tracking and green finance tools.

However, it's important to note that companies cannot simply purchase the latest sustainable technology and expect it to deliver their sustainability goals. Instead, they need to have a clear understanding of how they use technology, what they are using it for, and how well it aligns with their overall sustainability strategy.

The big picture

Ultimately, sustainability and going green are about much more than just technology. To be truly sustainable, companies have to see the big picture and discover how they can contribute meaningfully to the wider world. The good news is that there are many ways to accomplish this. One well-known method is sustainability reporting, where companies track and publish their progress towards their established sustainability goals. This process can help companies decide what areas they need to focus on and how to utilize their resources most effectively.

Sustainability reporting also plays a crucial role in the communication strategy of an organization's sustainability journey, which in turn helps promote sustainable business philosophies. After all, if consumers and investors can't support a company's efforts if they don't even know it is striving for a greener future.

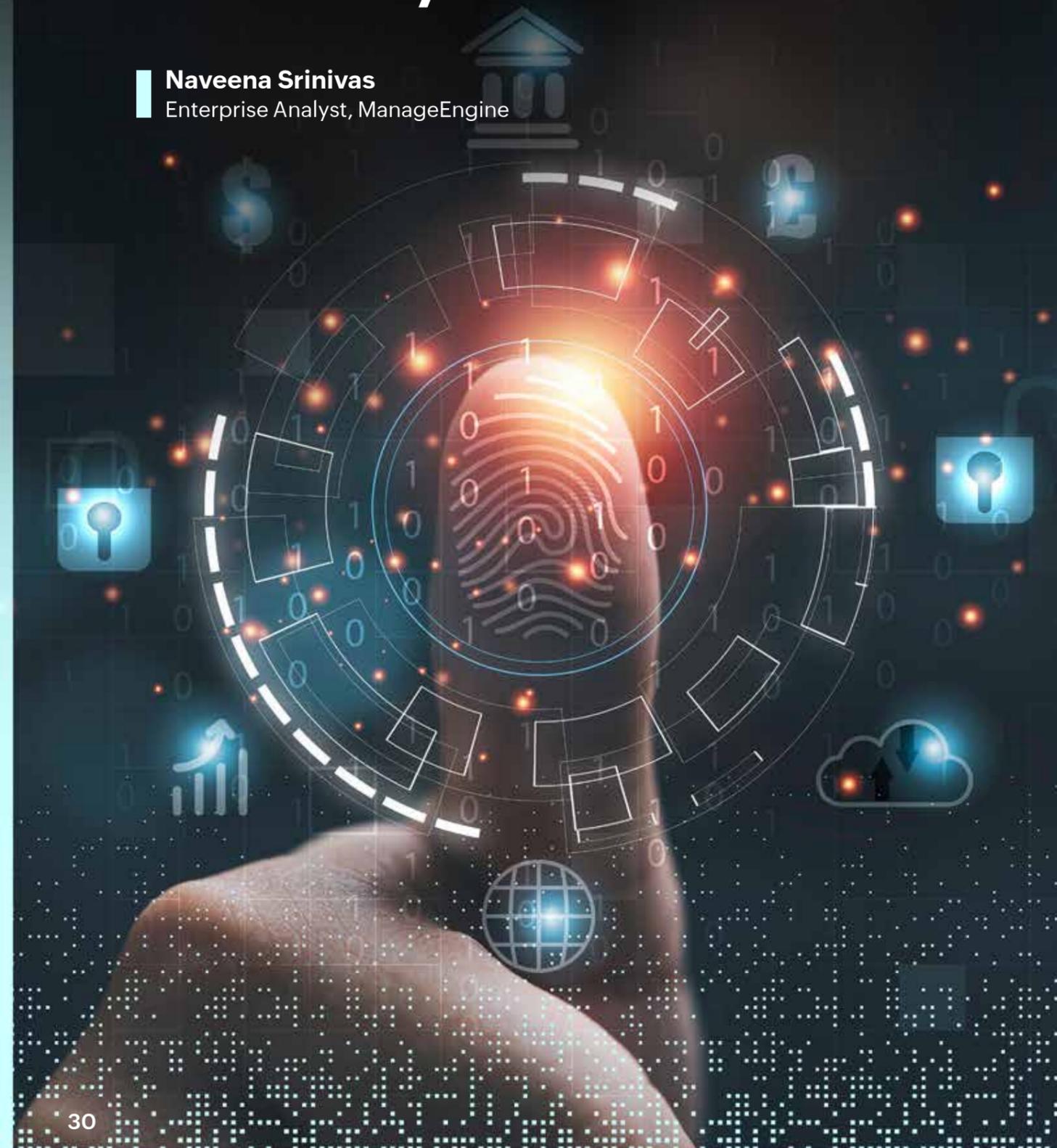
Technology may be just one piece of the sustainability puzzle, but it's one of the most crucial pieces. As mentioned earlier, organizations are in a unique position of power to significantly change the world through using technology to drive sustainable practices. Organizations can also influence millions of people to follow their lead. As a growing number of businesses implement sustainable practices, everyone will benefit from a greener world. It's easy to think of sustainability as a problem for someone else to solve, but the change starts with you.



Making IAM easier and more secure: The power of identity fabric

Naveena Srinivas

Enterprise Analyst, ManageEngine



Imagine being able to authenticate your identity with a simple glance or touch rather than struggling to remember yet another complex password or passcode. Does it sound too good to be true? Typically, organizations use a decentralized strategy to manage identities and access to resources, with each system or environment controlling its own set of identities and access controls. But as organizations have shifted to multi-cloud and hybrid environments, this decentralized strategy has grown more complex and challenging to manage.

Existing IAM solutions are unable to keep up with the pace of digital transformation and provide identity assurance for the modern, mobile workforce. They are also struggling

to provide a unified customer experience. Enter identity fabric: a concept that refers to the usage of an IAM system that is centrally controlled to manage identities and access across an organization's complete IT infrastructure, including various cloud and on-premises environments.

Did you know?

A UK-based survey reveals that [94% of surveyed](#) business leaders, CISOs, and CSOs confirmed that businesses are indeed cutting corners and opening the door to more identity fraud by not having sufficient measures in place to check and verify identities online.



What is identity fabric, and how is it better than traditional practices?

Identity fabric is changing the way we think about IAM. Unlike traditional IAM practices, which often rely on static, one-size-fits-all approaches to authentication, identity fabric takes a more dynamic and holistic view of identity, incorporating a wide range of personal and social factors in order to create a more comprehensive and accurate view of an individual's identity. It is a concept that has become increasingly relevant in the digital age because the way we interact and communicate with each other has changed significantly.



In a nutshell, identity fabric is a system that uses a combination of technologies and processes to manage and verify identities. This may include incorporating biometric data, such as facial recognition or fingerprints, as well as social factors, such as a user's online activity or personal connections. By taking a more comprehensive view of identity, identity fabric may be able to create a more robust and secure system for authentication.

Identity fabric is a term used to describe the various elements that make up an individual's identity, including their personal and professional characteristics, traits, and attributes.

This can be especially useful for businesses and organizations that need to verify the identity of their employees or customers since it allows them to gather a wide range of information about an individual in a single place.

Why is identity fabric such a game changer?

For one, identity fabric can help to enhance security and protect against identity theft and other cyberthreats. By incorporating a broader range of personal and social factors into the authentication process, identity fabric may be able to create a more robust and secure system that is less susceptible to identity fraud or unauthorized access. This could be particularly useful in industries where security is of the utmost importance, such as financial services or healthcare.

Apart from enhancing security, identity fabric can also improve the user experience. Rather than having to remember multiple passwords or passcodes, users may be able to authenticate their identity with a simple touch or glance. For example, an organization might use identity fabric to connect its employee database, customer database, and other systems that contain information about individuals. This allows the organization to have a more complete view of an individual's identity, which can be useful for a

variety of purposes, such as security, fraud prevention, and customer service.

Identity fabric provides a consistent set of IAM policies and protocols across all environments, reducing the complexity and potential for inconsistencies in the way identities are managed. By using standardized protocols such as SAML, OAuth, and OpenID Connect, identity fabric solutions can facilitate interoperability between different cloud and on-premises environments, minimizing the need for custom integrations. It can also automate and streamline routine identity-related tasks and processes, such as account provisioning and deprovisioning, password management, and access control. But the benefits of identity fabric do not stop there.



By taking a more holistic view of identity, identity fabric may also be able to better protect personal data and meet the growing regulatory requirements around data privacy. Like any technology, identity fabric can present a range of security and privacy challenges. The major concern is to ensure the security of the collected data and that the usage

of this information is in compliance with relevant laws and regulations, such as the General Data Protection Regulation in the European Union. Above all, identity fabric can provide organizations with a more robust and effective IAM solution, helping to improve security, streamline processes, and reduce the risk of data breaches.

Is identity fabric the future of IAM?

It is certainly looking that way. As organizations seek to secure access to sensitive data and systems, they may find that identity fabric is the key to success. With its enhanced security, improved user experience, and ability to protect personal data and meet regulatory requirements, identity fabric is poised to revolutionize the way we think about identity management. With the continued adoption in multi-cloud and hybrid environments, organizations' need for a centralized approach to IAM is expected to increase.

Identity fabric is expected to become

more prevalent in the coming year, with the adoption of AI and ML technologies further enhancing the capabilities of identity fabric solutions. Predictive analytics and proactive issue prevention are expected to become key features of identity fabric solutions, enabling organizations to proactively identify and address potential issues before they become critical. Automation and self-service capabilities are also expected to become more common, further streamlining and simplifying the process of managing identities and access. So, it's a good idea for organizations to consider incorporating identity fabric into their IAM strategy in order to stay ahead of the curve and better protect against threats.

Half of all identity theft victims (51%) lived in homes with an annual income of \$75,000 or more, according to a 2018 [study by the Bureau of Justice Statistics](#).



2023 workforce strategy: Convictions over conditions

Brent Dorshkind
Editor, ManageEngine

With a new year upon us, the state of the IT workforce represents a pressing yet puzzling enigma for organizations of all sizes and sectors. Summing up the current IT jobs market for InformationWeek, Senior Editor [Jessica Davis wrote](#), “Heading into 2023, the signals are mixed.”

“We entered 2022 in the midst of a talent crisis when skilled IT pros were moving to new jobs and getting a bump in compensation,” Davis wrote. By the end of 2022, however, we were left “wondering if massive tech layoffs and whispers of budget cuts are signaling a change, even though tech job openings are still abundant.”

Despite the mixed signals from the market—including employers, employees, and economists—hiring managers and company leaders can take measured steps to hire, retain, and if necessary, lay off IT talent. The trick is to ground those steps in the enduring values of your organization rather the transitory conditions of the market.

Mixed signals

Over 1,000 technology companies laid off more than 153,000 employees in 2022, according to [Layoffs.fyi](#). The website tracks layoffs in the tech industry, including United States and international offices, and primarily uses media reports, company announcements, and direct confirmations to generate its numbers. The numbers are even higher at [TrueUp.io’s tech layoff tracker](#): “In 2022, there were 1,517 layoffs at tech companies with 237,874 people impacted.”

“Despite industry wide layoffs, there are still more than 375,000 tech jobs in the U.S. that need to be filled going into 2023,” [wrote Keerthi Vedantam, reporter for Crunchbase News](#).



“That would mean there are 4x as many job openings as there have been layoffs recorded in our [Crunchbase] database this year.”

Vendantam added that laid off tech workers have been quick to find new jobs: “...70% of laid off U.S. tech sector employees since March 2022 have been able to find a job within three months of being unemployed. That number has been steadily climbing—in October, 75% of laid off workers found a new job within three months.”

And many employees remain optimistic about their prospects for 2023. The staffing and talent solutions firm [Robert Half recently surveyed](#) more than 2,500 professionals in the U.S. and found that “46%...are currently looking or plan to look for a new role in the first half of 2023.”

“Noise around hiring freezes and layoffs at some companies hasn’t seemed to faze workers—many are just as confident in their job prospects as they were six months ago,” said Paul McDonald, senior executive director of Robert Half. “The labor market remains tight, and professionals are curious about exploring new and more fulfilling career paths.”

The Robert Half findings parallel those of ManageEngine’s own survey, [IT at work: 2022 and beyond](#). In our global study of 3,300 decision-makers across IT and other key business functions, 48% of IT leaders reported that they are actively looking for a new job. In the U.S., that number rises to 58%.

Meanwhile, [CNBC Markets Editor Patti Domm reported](#) that “everyone thinks a recession is coming in 2023,” including Mark Zandi, chief economist at Moody’s Analytics; Tom Simons, money market economist at Jefferies; and Diane Swonk, chief economist at KPMG.

CEOs share the economists’ opinion. [The 2022 KPMG U.S. CEO Outlook](#) finds that “a majority (91%) of U.S. CEOs believe that there will be a recession in the next 12 months.” The KPMG report represents survey results from 400 U.S. CEOs from companies with at least \$500 million in revenues—36% representing companies with revenues of at least \$10 billion.

Enduring values

Nobody can ever truly know what the future holds, [Sridhar Vembu recently reminded business audiences in India](#). The CEO of ManageEngine’s parent company, Zoho Corp., Vembu instead concentrates on what he does know and can control—the values, convictions, and principles that endure and underpin his company’s actions. He encourages other organizational leaders and business professionals to do the same.

For 2023, Vembu’s workforce strategy looks a lot like the one that’s guided Zoho since its founding in 1996, i.e., [unwavering commitment to employees](#). He and his team know that running a successful company requires more than favorable business conditions. It requires a community of people with shared purpose and clear vision. Employees define an

organization more than any product it builds or service it provides. That’s why ManageEngine and every other division of Zoho place their employees and their quality of life at the center of every decision they make. Maybe you should, too.

Now, commitment to employees will look different at different times and in different organizations. For this year, employee surveys offer clues and suggestions about what it might look like for you.

The [Robert Half survey](#) reveals that workers seeking new jobs in the first half of 2023 are motivated by “a higher salary (61%), better benefits and perks (37%), and greater flexibility to choose when and where they work (36%).” An [earlier version of the survey](#) included “greater opportunities for advancement and a career change after experiencing burnout” as top motivators.



Conversely, when they apply for new jobs, candidates lose interest when they experience “unclear or unreasonable job responsibilities (56%), poor communication with the hiring manager (50%), or misalignment with the company culture and values (36%).”

Our [IT at work: 2022 and beyond](#) survey shows that the top three things IT decision-makers want most from their roles in the next five years are the potential to learn new skills (46%), the ability to guide change within the organization (44%), and more collaboration with teams across the business (44%).

And what would drive IT decision-makers to resign from their current organization? According to our survey, they would leave if the organization no longer offered a flexible work model (48%), potential for advancement or promotion (47%), pay increase in line with inflation (46%), technical training (43%), acknowledgement from or working with senior management (42%), and non-technical training (28%).

In addition to meeting the employee prerequisites and preferences noted above, committing to employees may also include cultivating their

[trust within teams](#) and [within the organization](#) as a whole; their [autonomy, accountability, mastery, and purpose](#); and their [overall well-being](#).

Of course, circumstances may compel you to “de-commit” to some of your employees. Few companies have the resolve or resources to make layoffs a last resort, or refuse them altogether as ManageEngine and the rest of Zoho Corp. did in 2020 at the start of the pandemic. Even fewer companies have the patience to grow at a sustainable pace that makes layoffs unnecessary, regardless of prevailing business conditions.

If you do have to lay off employees, please don’t do it in a [group Zoom meeting](#) or an [email blast](#). Do it one-on-one—in person, if possible—with compassion and respect. After all, these are the people who committed to your company and its vision. They’re not quitting the company. The company is quitting them. Do it with honor.

2023 is starting out under a cloud of uncertainty. Let your organization’s values shelter your employees—and by extension, your customers and your business—from the storms ahead.



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About us

Technology is ever growing and ever evolving. Today, the world is at a juncture where technology permeates every aspect of our lives. It's inescapable and without technology we would find ourselves crippled. For 20 years now, ManageEngine has been on the front lines of the evolution that is democratizing IT. ManageEngine Insights harnesses that deep pool of IT experience to pursue a supporting mission: the democratization of IT knowledge. Insights covers timely and timeless IT issues from the values-based worldview that drives ManageEngine, and our parent company, Zoho Corp. We believe your IT, business, employees, customers, and supporting communities are inescapably interconnected, creating a bigger, integrated whole for you to consider when making decisions about IT and business. Insights offers wise counsel on such decisions. Insights is IT knowledge for democratized IT.



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