

## Galaxy and Cisco hosted an event that focused on

### "SECURE ANY USER, ON ANY DEVICE, REMOTELY WITH 360° APPROACH,"

providing valuable insights into modern cybersecurity practices. The session delved into cutting-edge strategies to secure users and devices remotely. The event was a testament to the commitment of industry leaders like Cisco in safeguarding digital landscapes with a holistic and proactive approach.



**MD** SPEAKS

**Anoop Pai Dhungat**  
Chairman & Managing Director

Dear Readers,

Last month, I had written about some examples where Artificial Intelligence solutions can help in sustainability and fight climate change. This month, I would like to make you aware of some of the risks and dangers of rushing into AI solutions without the correct governance policies and guardrails.

Most AI models are trained on public data. Organisations try to further enhance this training by adding their own data as well. This increases the chances of data security breaches that could expose consumers' personal information. A recent survey found that 48 percent of businesses have entered non-public company information into generative AI tools and 69 percent are worried these tools could damage their intellectual property and legal rights. A single breach could expose the information of millions of consumers and leave organizations vulnerable as a result.

Another common mistake that I have noticed is not using the correct model for the desired outcome. This results in an enormous wastage of valuable computing resources like GPUs and consequently consumes more power which defeats the very purpose of sustainability. Selecting the correct AI model to solve a given problem requires high quality data scientists and engineers.

At Galaxy, our AI solutions are built around extremely strong engineering and governance with proper guardrails in place to protect your organisation from data leaks, improper responses, excess power consumption and high TCOs. Do call our experts to know more about our solutions.

Happy reading.



## The Future Of Generative AI Beyond ChatGPT

Generative tools like ChatGPT and Stable Diffusion have got everyone talking about artificial intelligence (AI) – but where is it headed next?

It's already clear that this exciting technology will have a big impact on the way we live and work. UK energy provider Octopus Energy has said that 44% of its customer service emails are now being answered by AI. And the CEO of software firm Freshworks has said that tasks that previously took eight to 10 weeks are now being completed in days as a consequence of adopting AI tools into its workflows.

But we're still only at the beginning. In the coming weeks, months, and years we will see an acceleration in the pace of development of new forms of generative AI. These will be capable of carrying out an ever-growing number of tasks and augmenting our skills in all manner of ways.

So, let's take a look at some of the ways we can expect generative AI to evolve in the near future and some of the tasks it will be lending a hand with before too long:

### Beyond ChatGPT

Text-based generative AI is already pretty impressive, particularly for research, creating first drafts, and planning. Next-generation language models – beyond GPT-4 – will understand factors like psychology and the human creative process in more depth, enabling them to create written copy that's deeper and more engaging. We will also see models iterating on the progress made by tools such as AutoGPT, which enable text-based generative AI applications to create their own prompts, allowing them to carry out more complex tasks.

### Generative Visual AI

As well as text, current generative AI technology is quite good at creating images based on natural language prompts, and there are even some tools that use it to generate video. However, they have some limitations due to the intensive nature of the required data processing.

### Generative AI in the Metaverse

There are many predictions about how the way we interact with information and each other in the digital domain will involve. Many of these focus on immersive, 3D environments and experiences that can be explored through virtual and augmented reality (VR/AR). Additionally, generative AI can be used to create more

lifelike avatars that help to bring these environments to life, capable of more dynamic actions and interactions with other users.

### Generative Audio, Music, and Voice AI

AI models are already impressively capable when it comes to generating music and mimicking human voices. In music, generative AI is likely to increasingly become an invaluable tool for songwriters and composers, creating novel compositions that can serve as inspiration or encourage musicians to approach their creative process in new ways. We are also likely to see it being used to create real-time, adaptive soundtracks. This will open new possibilities for real-time translation, audio dubbing, and automated, real-time voiceovers and narrations.

### Generative Design

AI can be used by designers to assist in prototyping and creating new products of many shapes and sizes. Generative design is the term given for processes that use AI tools to do this. Tools are emerging that will allow designers to simply enter the details of the materials that will be used and the properties that the finished product must have, and the algorithms will create step-by-step instructions for engineering the finished item. Airbus engineers used tools like this to design interior partitions for the A320 passenger jet, resulting in a weight reduction of 45% over human-designed versions.

### Generative AI in Video Games

Generative AI has the potential to significantly impact the way video games are designed, built, and played. Designers can use it to help conceptualize and build the immersive environments that games use to challenge players. AI algorithms can be trained to generate landscapes, terrain, and architecture, freeing up time for designers to work on engaging stories, puzzles, and gameplay mechanics. It can also create dynamic content – such as non-player characters (NPCs) that behave in realistic ways and can communicate with players as if they are humans (or orcs or aliens) themselves, rather than being restricted to following scripts. This could potentially lead to games that are far more immersive and realistic than even the most advanced games available today.

Galaxy plays an important role by working with multiple OEMs across Hardware & Software, AI solution provider, partners and stitch overall solutions for end customers across industries. Talk to our experts, email us at [marketing@goapl.com](mailto:marketing@goapl.com)

<https://shorturl.at/wMW9p>



## Modular Computing: Customization Meets Innovation

Modular computing is the disaggregation of compute resources in a chassis or system. Resources can be storage, CPUs, memory, accelerators, and networking. IT teams can then use software to assemble the assets and define the exact resources needed to support apps or services.

### Why is modular computing needed?

Modern applications have dynamic resource requirements that require flexible infrastructure. There is also constant technological change that will deliver more performance and new capabilities. However, new technology needs to be absorbed in a way that is nondisruptive to customer environments.

### How does modular computing work?

Modular computing is defined as sets of computing resources that are combined with software to become a server. The users allocate only the resources they need for a particular application.

For example, CPUs, GPUs, and NVMe drives can reside within a chassis and be interconnected with a high-speed, low-latency fabric. Using software, IT teams can attach one or more GPUs or drives to the CPUs, creating a server optimized for a specific application.

Each time an application is created, a set of computing services and resources is defined to support it. When the application has expired, the computing support expires as well, and resources become available for other apps.

In practice, modular computing requires the cooperation of OEMs (original equipment manufacturers). OEMs are currently adopting industry standards such as those from IEEE for modular computing in blade and rack servers, including:

- ▶ Fabric and bus technologies such as CXL (Compute Express Link)
- ▶ High-speed connectors such as silicon photonics
- ▶ Significantly higher maximum power limits

With current technology, the distance between the various modular computing items needs to be relatively close, usually within the same rack.

### Benefits of modular computing

At the heart of modular computing is flexible

infrastructure that can be customized and optimized to meet the needs of applications. The benefits of modular computing include:

#### ▶ Efficiency

Because compute resources are allocated or shared, modular computing reduces overprovisioning and underprovisioning. It also allows the deployment of more applications with fewer resources and a smaller footprint of server space or cloud services.

#### ▶ Investment protection

In perhaps 10 years' time, modular computing will enable microallocation and rely less on hypervisor fees, also known as licensing fees, and other software present on computing cores. Also, because modular computing systems can be selectively upgraded piece by piece, lifecycles for hardware overall are extended, lowering ongoing costs over time.

#### ▶ Improved operations

Modular computing can be thought of as bringing DevOps concepts—such as containerization, automation, and virtualization—to hardware management.

For example, modular computing resources can be managed and defined through software, increasing agility and improving planning, cost control, and compliance through enhanced observability. As IT teams set policies, automation can streamline processes and further reduce workloads.

#### ▶ Future-ready

Modular computing is, by nature, growth-ready, which means scaling is as simple as adding or upgrading individual modules. It's also future-ready, designed to evolve as new technologies and business objectives emerge. Modular computing will also enable hot-swapping of components, that is, the ability to upgrade components without taking the entire system offline.

#### ▶ Improved experiences

Modular computing's flexibility can also help provide developers the exact resources they need to optimize application performance and deliver high-quality customer experiences.

<https://shorturl.at/AE7Dd>



## Guardians of Reputation: A Guide to Brand Monitoring

Brand monitoring in cybersecurity involves tracking and analyzing various channels to detect any unauthorized use, misuse, or exploitation of a brand's identity, trademarks, and intellectual property. This practice is crucial for protecting the reputation and integrity of a brand in the digital space. Here are key aspects of brand monitoring in cybersecurity:

- ▶ **Detection of Phishing Attacks:** Monitoring helps identify phishing websites and emails that impersonate a brand to deceive customers or employees. This can prevent financial losses and protect sensitive information.
- ▶ **Protection Against Brand Impersonation:** Cybercriminals may create fake social media profiles, websites, or apps using a brand's identity. Monitoring helps detect and take down these fraudulent entities.
- ▶ **Monitoring Dark Web Activity:** Cybersecurity tools scan dark web forums and marketplaces for mentions of the brand, which can indicate stolen data, credentials, or plans for targeted attacks.
- ▶ **Intellectual Property Protection:** Monitoring helps identify unauthorized use of trademarks, logos, and copyrighted content, allowing the brand to take legal action to protect its intellectual property.
- ▶ **Reputation Management:** By tracking online mentions, reviews, and discussions, brands can quickly address negative publicity or misinformation, mitigating potential damage to their reputation.
- ▶ **Incident Response:** Early detection of cyber threats and breaches involving the brand allows for faster incident response and mitigation, reducing the impact of cyber incidents.
- ▶ **Competitor Analysis:** Monitoring can also include tracking competitors' activities and potential threats posed by them, helping brands stay ahead in the market.
- ▶ **Compliance and Regulatory Adherence:** Ensuring that all digital communications and brand representations comply with legal and regulatory requirements.

Brand monitoring in cybersecurity offers numerous advantages that are crucial for protecting a company's reputation, intellectual property, and customer trust. Here are some key benefits:

- ▶ **Early Threat Detection:** By continuously monitoring various online channels, brands can detect cyber threats, such as phishing attacks, brand impersonation, and data breaches, early. This allows for swift action to mitigate potential damage.
- ▶ **Customer Trust and Loyalty:** Protecting customers from phishing scams and other fraudulent activities enhances their trust in the brand. This leads to increased customer loyalty and a positive brand image.
- ▶ **Protection of Intellectual Property:** Monitoring helps detect unauthorized use of trademarks, logos, and copyrighted content. This enables brands to take legal action to protect their intellectual property and maintain brand integrity.
- ▶ **Improved Response:** Early detection of cyber threats allows for faster incident response and containment. This minimizes the impact of cyber incidents, reducing downtime and financial losses.
- ▶ **Enhanced Security Posture:** Continuous monitoring of the digital landscape helps in identifying vulnerabilities and potential attack vectors. This enables brands to strengthen their cybersecurity measures proactively.
- ▶ **Cost Savings:** Early detection and prevention of cyber threats can save brands significant amounts of money that would otherwise be spent on dealing with the aftermath of a cyber attack, including legal fees, fines, and remediation costs.
- ▶ **Market Intelligence:** Brand monitoring provides valuable insights into market sentiment, customer preferences, and emerging trends. This information can be used to inform marketing strategies and product development.
- ▶ **Brand Intelligence tools** can help companies identify and prevent brand abuse by collecting and analysing data related to customer sentiment and emotion about a brand. By leveraging the resulting insights, companies can predict consumer behaviour and reach performance goals, such as reducing customer churn or improving customer satisfaction.

## Role of AI

Artificial Intelligence (AI) can be a powerful tool for marketers and infosec personnel to improve their brand intelligence. AI helps remove barriers between brands and customers by providing deeper insights into customer behaviour, thereby giving marketers key insights to improve user experience and tailor their communications to better suit their audience. AI can also help businesses identify and prevent brand abuse by collecting and analyzing vast quantities of data related to customer sentiment and emotions about a brand.

- ▶ **Real-Time Analysis:** AI systems can analyse data in real-time, providing immediate alerts when a potential threat is detected. This enables companies to respond quickly to mitigate risks and prevent damage.
- ▶ **Natural Language Processing (NLP):** NLP enables AI to understand and interpret human language, making it possible to analyze text for sentiment, context, and relevance. This helps in identifying negative mentions, fake reviews, and misinformation related to the brand.
- ▶ **Image and Video Recognition:** AI-powered image and video recognition tools can identify unauthorized use of a brand's logos, trademarks, and other visual assets across various digital platforms. This helps in detecting and taking down counterfeit or infringing content.

- ▶ **Pattern Recognition and Anomaly Detection:** AI can identify unusual patterns and anomalies that may indicate a cyber threat. For example, sudden spikes in negative mentions or unusual activity on social media can be flagged for further investigation.
- ▶ **Sentiment Analysis:** AI-driven sentiment analysis tools can gauge public sentiment towards a brand by analyzing online discussions and reviews. This helps companies understand how their brand is perceived and identify potential PR issues early.
- ▶ **Automated Takedown Requests:** AI systems can automate the process of submitting takedown requests for fraudulent or infringing content. This speeds up the removal of harmful content and reduces the burden on legal and compliance teams.
- ▶ **Customization and Personalization:** AI can tailor brand monitoring solutions to the specific needs and risk profiles of different companies. This ensures that monitoring efforts are focused on the most relevant threats and vulnerabilities.
- ▶ **Integration with Other Cybersecurity Tools:** AI-powered brand monitoring solutions can integrate with other cybersecurity tools and platforms, providing a holistic view of the brand's security posture and enabling coordinated responses to threats.

Not having brand monitoring in cybersecurity leaves a company vulnerable to a wide range of threats that can harm its reputation, financial health, and operations integrity. Galaxy helps to implement brand monitoring to proactively detect and mitigate these risks, ensuring the company's long-term success and security. To talk to our experts, email us at [marketing@goapl.com](mailto:marketing@goapl.com)





### Tech Mahindra and Cisco to deliver AI-powered firewall solution

Tech Mahindra expands partnership to deliver NGFW modernization solution with Cisco solution includes unified policy management, Talos threat intelligence integration, and comprehensive malware defense for network and endpoints. Tech Mahindra announced the expansion of its strategic partnership with Cisco to deliver a next-generation firewall (NGFW) modernization solution for their shared global customers.

The partnership between Cisco and Tech Mahindra elevates standard firewall functions with sophisticated features such as unified policy management across on-premises and cloud environments. Additionally, it integrates Talos threat intelligence and delivers comprehensive malware defense for the network and endpoints, among other enhancements.

Kunal Purohit, chief digital services officer, of Tech Mahindra, said, "Enterprises need a flexible approach that allows them to scale at speed while modernizing their network security. While firewalls are critical to the organization's network security, they can be time-consuming, complex, and expensive to deploy, manage, and operate. The partnership with Cisco marks a milestone in providing a unique, robust, efficient, and cost-effective solution for the firewall modernization roadmap."

The partnership aims to expand Tech Mahindra's security service portfolio, extend market reach, and create upskilling opportunities for its workforce. Leveraging Tech Mahindra's extensive network and security engineering consultancy resources, the collaboration includes a robust team operating across key global markets, including the Americas, Europe, and Asia-Pacific.

<https://tinyurl.com/mcnsd3nb>

### Google partners with Nevada utility for geothermal to power data center

Google has entered into an agreement with Berkshire Hathaway electric utility NV Energy to power its Nevada data centers with advanced geothermal electricity, the U.S. technology company said.

The deal, which has been sent to state utility regulators for approval, would increase the amount of carbon-free geothermal electricity injected into the local power grid for Google's operations to 115 megawatts from 3.5 megawatts in about six years, Google said in a statement.

The agreement comes as the world's biggest technology companies hunt for massive amounts of electricity to power their rapidly expanding data centers or giant computer warehouses, needed to support technologies like generative artificial intelligence and cloud computing.

The partnership advances Google towards its goal of running on entirely clean energy by 2030. So far this year, Google has announced plans to spend at least \$4 billion to build or expand data centers in Indiana, Missouri, and Virginia. Google's global operations were powered by 64% carbon-free energy, including wind and solar, according to the company's latest environmental report.

The partnership with NV Energy is a new way that companies with very large emerging electricity loads and climate goals may get their power in regulated power markets.

Regulated power markets require power to be purchased from the local utility, as opposed to directly from a power generator, which can make it challenging for companies seeking all-clean energy.

<https://tinyurl.com/4hby3ksf>

*All product names, logos, brands, trademarks, and registered trademarks are property of their respective owners.*



A-23/24, Ambika Towers, Ground Floor,  
Off. Jijamata Road, Nr, Pump House,  
Andheri (E), Mumbai - 400 093, India.



+91-22-46108999



marketing@goapl.com



www.goapl.com