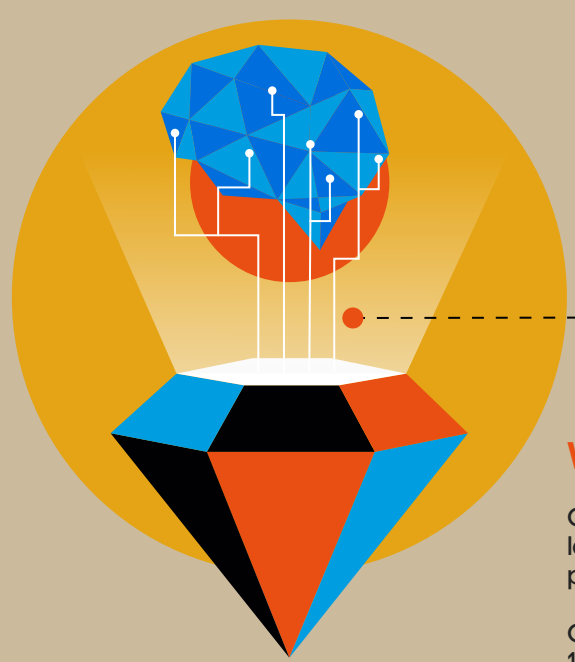
Future in Motion: Top 10 2022 Tech Trends

Gartner's annual Strategic Technology Trend list is considered to be the definitive predictor of what's to come. Innovative businesses with the most successful track records know to pay attention to every one. This year's trends fall into three distinct categories: engineering trust, sculpting change, and accelerating growth. Get a glimpse of the individual technologies supporting each pillar.

01 Redefining "Real" with Generative Artificial Intelligence



What is it?

A machine learning method that can study content or objects to make convincing yet completely original creations.

How is it used?

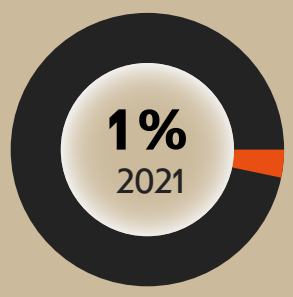
Accelerated R&D cycles, software code creation, drug development and targeted marketing.

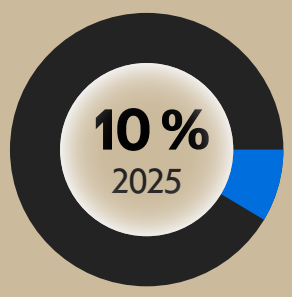
Watch out for misuses like phishing scams, public disinformation and digital fakes that are virtually indistinguishable from reality.

What to expect?

Generative AI today:
less than 1% of all data produced.

Generative AI by 2025:
10% of all data produced.





02 Data Fabric: The Fabric of Our Lives?

What is it?

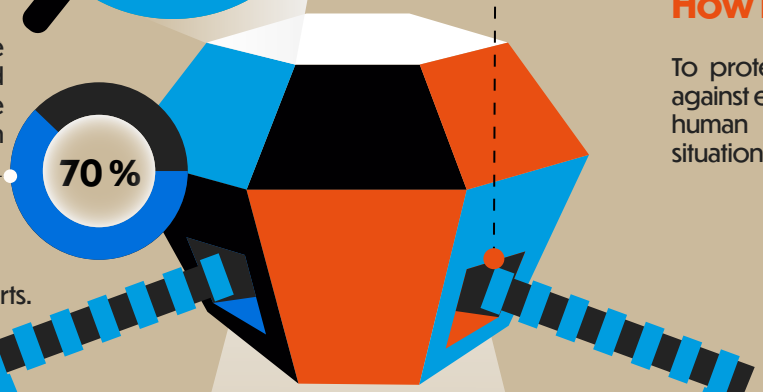
A method for integrating data across platforms and users in a flexible, resilient way using continuous analysis.

How is it used?

To simplify data integration infrastructure and support, to focus less on tactical and more on strategic insights that impact the business, and to share event-driven data in real time.

What to expect?

70% reduction in data management efforts.
Reduced human error and costs.



03 More Autonomic Systems and Fewer Software Updates

What is it?

Self-managed, environmentally aware systems that can self-edit their own algorithms for optimization, sans software updates.

How is it used?

To protect complex security environments against emerging cyber threats and mimic the human ability to adapt behavior in new situations.

What to expect?

Less human intervention.
More automatically adaptable robots, drones, manufacturing machines, and smart tech.

04 Remote Workers Get a Boost with Distributed Enterprises

What is it?

A digital-first model of supporting remote workers and virtual offices.

How is it used?

Reimagined service delivery for geographically dispersed workers and users from digital dressing rooms to virtual classrooms.

What to expect?

25% faster revenue growth.
Most of your successful competitors will be doing it by 2023.

05 Better Business Decisions with Decision Intelligence

What is it?

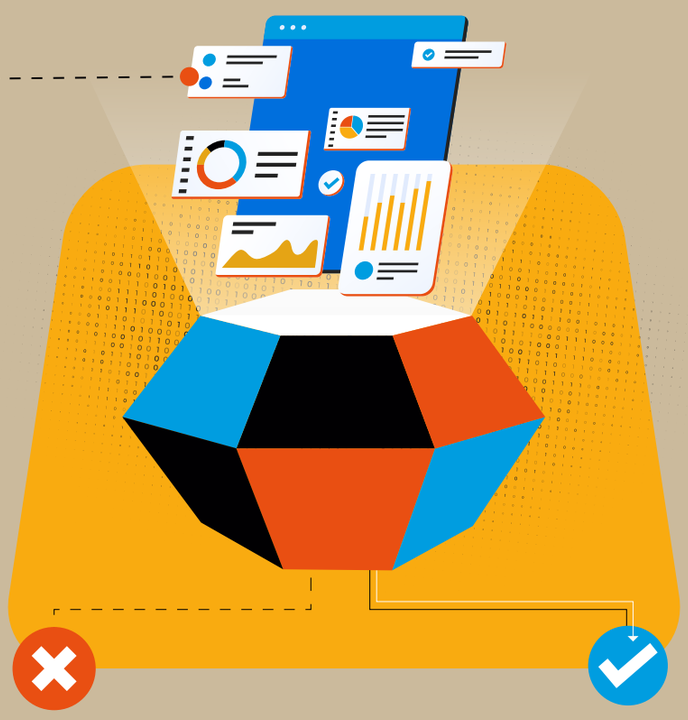
A new process that reengineers how businesses make informed, strategic decisions using analytics to better evaluate outcomes.

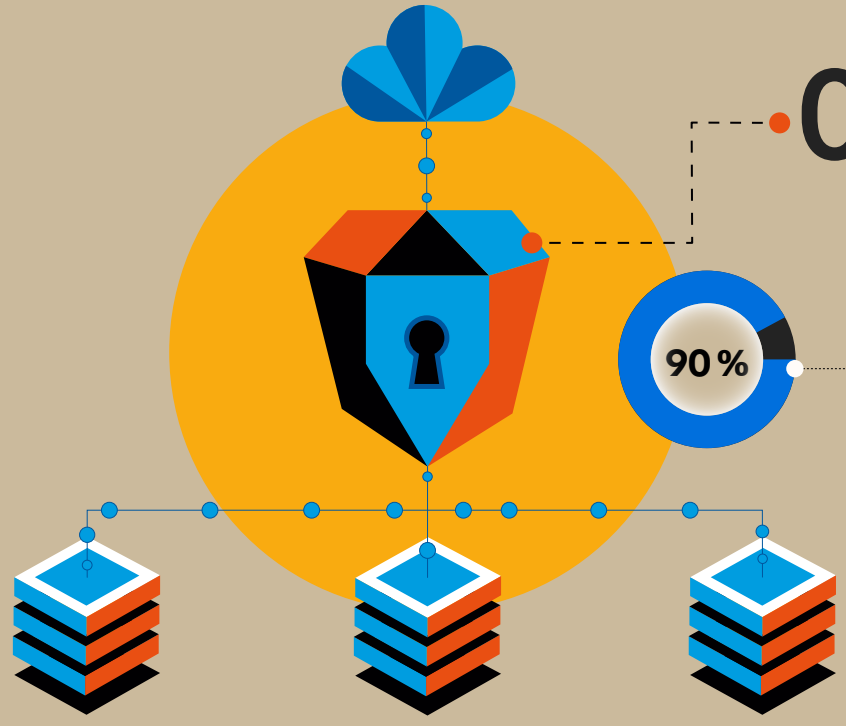
How is it used?

Data and insights are approached with a connected, contextual, and continuous mindset, and processed using tech like augmented analytics, simulations, and AI.

What to expect?

More automated decision-making.
A third of organizations will use DI to be more competitive within two years.





06 Cybersecurity Mesh Strains Threats

What is it?

A flexible, composable architecture that works as an interconnected, cooperative ecosystem.

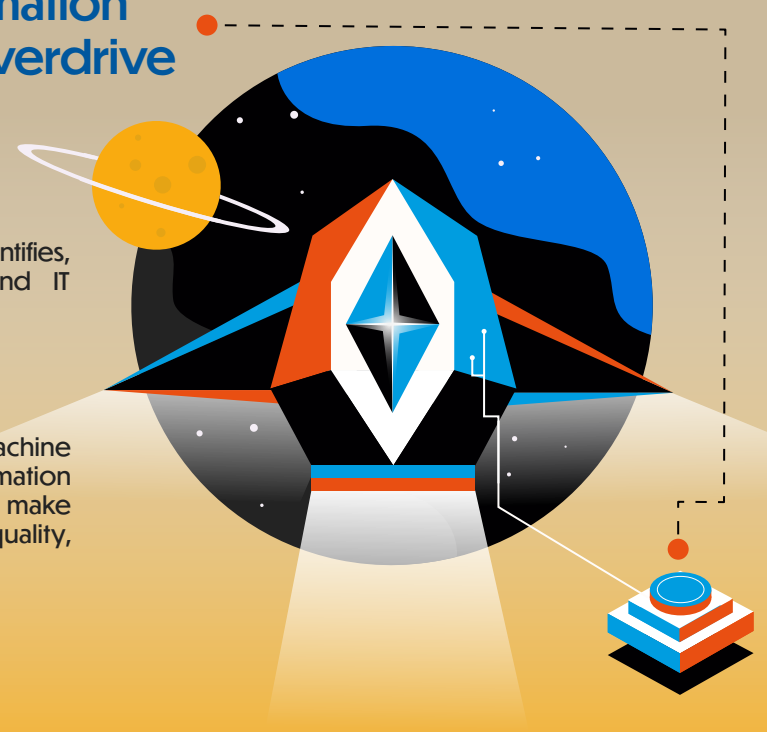
How is it used?

Protects assets across disparate locales by moving control points closer to them in both cloud and non-cloud environments.

What to expect?

CSMA adoption increases and individual security incidents fall, reducing financial impact by 90%. By 2025, threat actors develop malware for operational technology capable of causing human casualties.

07 Hyperautomation goes into overdrive



What is it?

A growth-oriented approach that identifies, vets, and automates business and IT processes.

How is it used?

Orchestrates tech tools from machine learning and robotic process automation to event-driven architecture to make better decisions, improve work quality, and enhance agility.

What to expect?

Increased scalability and optimized remote operations. Top-performing teams will implement several automation initiatives every year.

08 Securing Long-Term Business Value with AI Engineering

What is it?

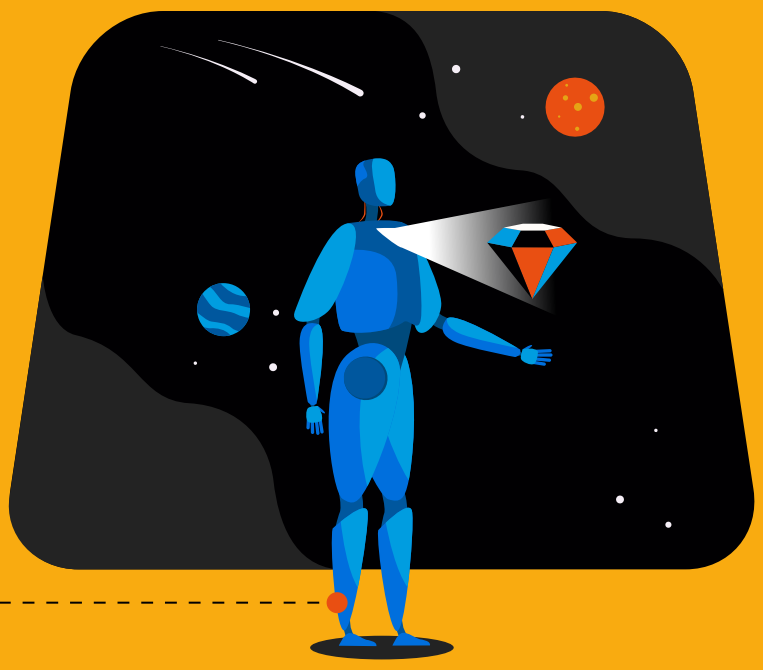
An integrated way to operationalize AI models and use them with existing applications to increase value over time.

How is it used?

Data, models, and applications get automatically updated which streamline AI delivery across the entire enterprise.

What to expect?

Rapid AI change that enhances business value.
10% of adoptees will generate 3X more value than 90% of their competitors.



09 Privacy-Enhancing Computation (PEC) = More Customer Trust

What is it?

A way of protecting and processing personal and sensitive information in untrusted environments.

How is it used?

Works at the software and hardware level to securely share, pool, and analyze data while adhering to compliance and confidentiality requirements.

What to expect?

60% of businesses will use one or more PEC techniques by 2025.
International privacy and data protection legislation to increase significantly.

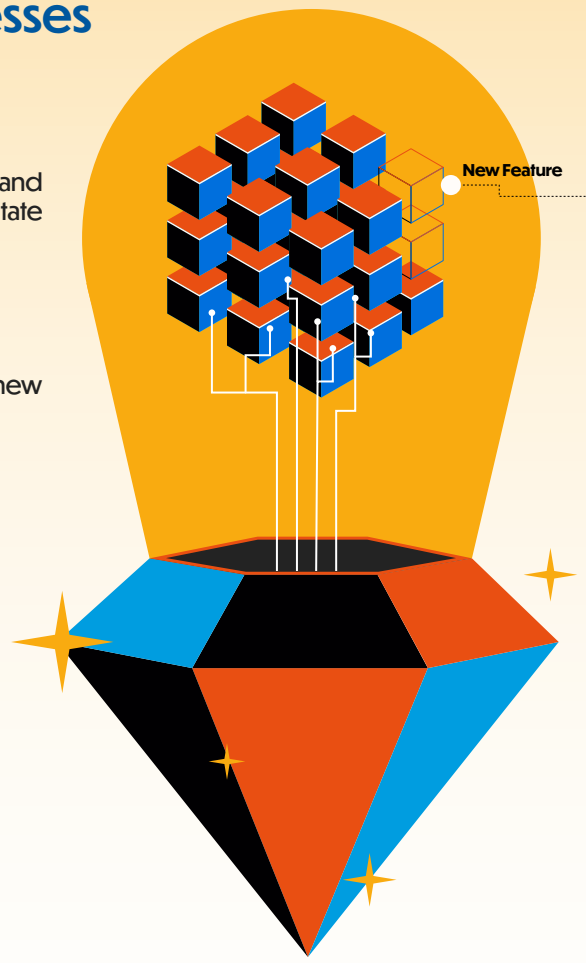
10 Composable Applications Make for Resilient, Adaptable Businesses

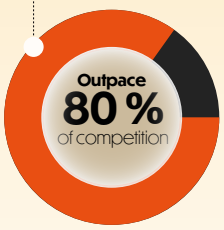
What is it?

Interchangeable building blocks and modular components that facilitate efficient application changes.

How is it used?

Code is used to accelerate new software solutions' time to market.





What to expect?

New feature implementation to outpace competition by 80%.

Unanticipated geopolitical events present the need for immediate business change.
For businesses to innovate and grow despite the unexpected in 2022, they'll need to use every tool available – and maybe some that haven't even been invented yet.

Future in Motion: Top 10
2022 Tech Trends

Gartner Inc (n.d.). Gartner Identifies the Top Strategic Technology Trends for 2022 Retrieved December 13, 2021 from the Gartner website: https://www.gartner.com/en/newsroom/press-releases/2021-10-18-gartner-identifies-the-top-strategic-technology-trends-for-2022