

# Table of Contents

<b>Digital Trends</b>	3
<b>Adaptive AI</b>	9
<b>AI engineering</b>	11
<b>AI security</b>	12
<b>AI TRISM</b>	13
<b>AI-driven development</b>	15
<b>Anywhere operations</b>	17
<b>Applied Observability</b>	18
<b>Augmented analytics</b>	19
<b>Autonomic Systems</b>	20
<b>Autonomous things</b>	21
<b>Blockchain</b>	22
<b>Cloud-Native Platforms</b>	23
<b>Composable Applications</b>	24
<b>Cybersecurity mesh</b>	25
<b>Data Fabric</b>	26
<b>Decision Intelligence</b>	27
<b>Democratization</b>	29
<b>Digital ethics and privacy</b>	31
<b>Digital Immune System</b>	32
<b>Digital twins</b>	33
<b>Distributed cloud</b>	34
<b>Distributed Enterprises</b>	35
<b>Empowered edge</b>	36
<b>Gartner</b>	37
2024	37
2023	37
2022	37
2021	38
2020	38
2019	38
<b>Generative AI</b>	40
<b>GitHub</b>	43
<b>Human augmentation</b>	44
<b>Hyperautomation</b>	45
<b>Immersive technologies</b>	48
<b>Industry Cloud Platforms</b>	49
<b>Intelligent composable business</b>	50
<b>Internet of Behaviors</b>	51
<b>Metaverse</b>	52
<b>Multiexperience</b>	54
<b>Platform Engineering</b>	55
<b>PMI Megatrends</b>	56
<b>Practical blockchain</b>	57

Privacy-enhancing computation .....

Privacy-Enhancing Computation .....

Quantum computing .....

Smart spaces .....

Superapps .....

Enterprise superapps .....

Sustainable Technology .....

The distributed cloud .....

The empowered edge .....

Total experience .....

Transparency and traceability .....

Wireless-Value Realization .....

58

59

60

61

62

62

65

67

68

69

70

71

- [Digital Trends](#)
- [Gartner](#)
- [GitHub](#)
- [PMI Megatrends](#)

# Digital Trends

## eBook

### What is Digital Trends?

Digital trends refer to the emerging technologies and strategies that are shaping the digital landscape and transforming the way we live, work, and interact.

## Digital Trends

- [Adaptive AI](#)
- [AI engineering](#)
- [AI security](#)
- [AI TRISM](#)
- [AI-Augmented Development](#)
- [AI-driven development](#)
- [Anywhere operations](#)
- [Applied Observability](#)
- [Augmented analytics](#)
- [Augmented Connected Workforce](#)
- [Autonomic Systems](#)
- [Autonomous things](#)
- [Blockchain](#)
- [Cloud-Native Platforms](#)
- [Composable Applications](#)
- [Continuous Threat Exposure Management \(CTEM\)](#)
- [Cybersecurity mesh](#)
- [Data Fabric](#)
- [Decision Intelligence](#)
- [Democratization](#)
- [Democratized Generative AI](#)
- [Digital ethics and privacy](#)
- [Digital Immune System](#)
- [Digital twins](#)
- [Distributed cloud](#)
- [Distributed Enterprises](#)

- [Empowered edge](#)
- [Gartner](#)
- [Generative AI](#)
- [GitHub](#)
- [Human augmentation](#)
- [Hyperautomation](#)
- [Immersive technologies](#)
- [Industry Cloud Platforms](#)
- [Intelligent Applications](#)
- [Intelligent composable business](#)
- [Internet of Behaviors](#)
- [Machine Customers](#)
- [Metaverse](#)
- [Multiexperience](#)
- [Platform Engineering](#)
- [PMI Megatrends](#)
- [Practical blockchain](#)
- [Privacy-enhancing computation](#)
- [Privacy-Enhancing Computation](#)
- [Quantum computing](#)
- [Smart spaces](#)
- [Superapps](#)
- [Sustainable Technology](#)
- [The distributed cloud](#)
- [The empowered edge](#)
- [Total experience](#)
- [Transparency and traceability](#)
- [Digital Trends](#)
- [Wireless-Value Realization](#)

## Thought Leadership

Thought leadership in digital trends is the ability to anticipate and stay ahead of emerging digital trends and technologies. To be an effective thought leader, it is important to stay up-to-date with the latest developments in areas such as artificial intelligence, blockchain, cloud computing, and the Internet of Things (IoT). Additionally, thought leaders must be able to communicate their insights effectively to a wide range of audiences, distill complex technical concepts into accessible language, and use storytelling techniques to engage and persuade. Finally, they must be willing to experiment, take risks, and learn from failures in order to stay ahead of the curve.

- [Gartner](#)
- [GitHub](#)
- [PMI Megatrends](#)

Examples of Thought Leaders in Digital Trends:

- **Tim Cook** - CEO of Apple, Cook has been a thought leader in the digital space for years. Under his leadership, Apple has continued to innovate with new products and services, such as the Apple Watch and Apple Pay.
- **Sheryl Sandberg** - COO of Facebook, Sandberg is a thought leader in the digital advertising

space. She has been instrumental in helping Facebook grow its advertising business, which has become one of the largest in the world.

- **Marc Benioff** - CEO of Salesforce, Benioff is a thought leader in the enterprise software space. He has been a vocal advocate for using technology to improve business processes and has helped Salesforce become a leader in cloud-based software.
- **Elon Musk** - CEO of Tesla and SpaceX, Musk is a thought leader in the electric vehicle and space exploration industries. He has been a driving force behind the development of electric cars and reusable rockets, and is known for his bold vision for the future of technology.
- **Jeff Sutherland** - Co-creator of Scrum, Sutherland is a thought leader in agile software development and democratization. He has been a driving force behind the adoption of agile methodologies in software development, which prioritize collaboration, flexibility, and continuous improvement, and has written extensively about the benefits of these methodologies for democratizing software development.
- **Reshma Saujani** - Founder and CEO of Girls Who Code, Saujani is a thought leader in digital education and female empowerment. She has been a driving force behind efforts to close the gender gap in technology and promote diversity and inclusion in the industry.
- **Reid Hoffman** - Co-founder of LinkedIn, Hoffman is a thought leader in the social media and professional networking space. He has been a vocal advocate for using technology to connect people and help them build their careers.
- **Sunil Prashara** - President and CEO of PMI, Prashara is a thought leader in project management and digital transformation. He has been instrumental in leading PMI's efforts to develop new digital tools and resources for project managers, and has been a strong advocate for using technology to improve project outcomes.
- **Martin Fowler** - Chief Scientist at ThoughtWorks, Fowler is a thought leader in software design and programming. He has been a driving force behind the development and adoption of agile methodologies in software development, and has authored several influential books on software design and architecture.
- **Linus Torvalds** - Creator of Linux, Torvalds is a thought leader in open source software development. He has been a pioneer in the development of the Linux operating system and has helped to create a vibrant community of developers and users around the world.
- **Satya Nadella** - CEO of Microsoft, Nadella has been instrumental in transforming the company from a traditional software company to a leader in cloud computing and artificial intelligence. He has been a strong advocate for using technology to solve some of the world's biggest challenges.

## Hot Digital Trends @ ALMBoK.com

Some Digital Trends hot topics include:

- **Digital Transformation:** Digital transformation refers to the integration of digital technologies into all areas of a business, resulting in fundamental changes to how the business operates and delivers value to customers. This includes areas such as customer experience, operations, and business models.
- **Artificial Intelligence (AI) and Machine Learning (ML):** The use of AI and ML is rapidly growing across industries, including finance, healthcare, retail, and transportation. These technologies are used to improve customer experiences, automate routine tasks, and make data-driven decisions.
- **Internet of Things (IoT):** IoT refers to the network of physical devices, vehicles, and other objects that are embedded with sensors, software, and connectivity to exchange data. IoT has the potential to transform industries such as manufacturing, transportation, and healthcare by

enabling real-time monitoring and control.

- **Cloud Computing:** Cloud computing has revolutionized the way organizations store, process, and manage data. It provides a flexible and scalable infrastructure that enables businesses to quickly respond to changing demands and reduce operational costs.
- **Low-code Development:** Low-code development platforms allow users to create applications using visual drag-and-drop interfaces and pre-built templates, without the need for coding expertise. This approach to software development enables faster prototyping, more agile development cycles, and easier collaboration between business and IT teams.
- **No-code Development:** Similar to low-code development, no-code platforms allow users to create applications without any coding skills. These platforms provide pre-built modules and templates that can be easily customized and configured to meet specific business requirements.
- **Citizen Development:** Citizen development refers to the process of creating software applications by business users with little or no coding experience. Citizen development platforms typically provide pre-built templates, visual drag-and-drop interfaces, and training resources to help non-technical users create their own applications.
- **Augmented Reality (AR) and Virtual Reality (VR):** AR and VR are technologies that create immersive experiences by combining virtual and real-world environments. These technologies have applications in entertainment, education, healthcare, and other industries.
- **Agile Development:** Agile development is an iterative approach to software development that emphasizes collaboration, flexibility, and rapid delivery of working software. Agile development methodologies, such as Scrum and Kanban, have become popular in recent years due to their ability to deliver high-quality software quickly and respond to changing requirements.
- **DevOps:** DevOps is a set of practices that combines software development and IT operations to enable faster and more reliable software delivery. DevOps emphasizes automation, collaboration, and continuous delivery to streamline the software development lifecycle and reduce the time-to-market for new applications.
- **Cybersecurity:** With the increasing threat of cyber-attacks, cybersecurity has become a critical concern for businesses and individuals alike. Emerging technologies such as blockchain and artificial intelligence are being used to enhance cybersecurity and protect against data breaches.
- **Big Data Analytics:** Big data analytics involves the collection, analysis, and interpretation of large and complex data sets. This technology is used to identify patterns, trends, and insights that can help businesses make data-driven decisions and improve their operations.
- **Digital Payments:** Digital payment systems such as mobile wallets, contactless payment methods, and cryptocurrencies are becoming increasingly popular. These payment methods offer convenience and security, and they are transforming the way we conduct financial transactions.
- **Edge Computing:** Edge computing involves processing data at the edge of the network, closer to where it is generated. This technology reduces the latency and bandwidth required for data transmission and enables real-time processing of data.
- **Digital Ethics and Privacy:** With the increasing use of digital technologies, concerns around data privacy and ethical issues such as bias and discrimination have become more prominent. Ensuring digital ethics and privacy is essential for building trust and maintaining customer loyalty.
- **Virtual Collaboration:** Virtual collaboration refers to the use of technology to enable collaboration between team members who are located in different geographic locations. Virtual collaboration tools, such as video conferencing, instant messaging, and collaboration software, enable team members to communicate and collaborate effectively regardless of their physical location.
- **Co-Creation:** Co-creation involves collaborating with customers, partners, and other

stakeholders to co-create new products, services, or solutions. Co-creation enables organizations to leverage the collective knowledge and expertise of their customers and partners to develop solutions that meet their needs and preferences.

- **Open Innovation:** Open innovation involves collaborating with external partners, such as customers, suppliers, and universities, to share ideas, knowledge, and resources to develop new products, services, or solutions. Open innovation enables organizations to tap into external sources of knowledge and expertise, and accelerate innovation.
- **Composable Applications:** Composable applications are software applications that are built from modular components, each of which performs a specific function and can be easily swapped out or replaced with another component. Composable applications enable organizations to rapidly assemble and deploy new applications and services using pre-built components, accelerating time-to-market and reducing development costs.
- [Hot Topics](#)

## ## ToDo ##



- <https://www.thinkwithgoogle.com/>
- <https://trends.google.com/trends>
- <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/the-top-trends-in-tech>
- <https://www.tiobe.com/tiobe-index>
- <https://productivityintelligenceinstitute.com/lead-your-industry/thought-leadership-trends-for-2022/>
- <https://www.digitaltrends.com/> (products, CES2023)
- <https://business.adobe.com/resources/digital-trends-report.html>
- <https://theecmconsultant.com/digital-transformation-trends/>
  1. Wider adoption of low code platforms
  2. Increased migration to the cloud
  3. AI and machine learning
  4. Intelligent search
  5. Automation
  6. Increased investment in Blockchain
  7. Virtual business collaboration
  8. Customer data platforms
  9. Everything as a Service (XaaS)
- <https://www.plainconcepts.com/tech-trends-2023/>
  1. Digital Twins
  2. Blockchain to redesign trust
  3. IoT for a hyperconnected world
  4. AI and Security
  5. Quantum Computing
  6. Metaverse
  7. Superapps
  8. Robotic Process Automation (RPA)
  9. New Energy Solutions
  10. Sustainable Technologies
- <https://blogs.mulesoft.com/digital-transformation/digital-trends-for-2023/>

1. Automation will be an enterprise-wide initiative
  2. Composability will be a core pillar of business strategy
  3. Low/no-code tools will speed up transformation
  4. Total experience (TX) strategies take over
  5. Data fabric will reduce the cost of bad decisions
  6. Edge computing will require a cybersecurity mesh approach
  7. Sustainability will drive ongoing IT investments
- <https://futorice.com/blog/tech-trends-for-2023-and-beyond>
    1. Generative AI
    2. Metaverse
    3. Low Code / No Code
    4. Web 3
  - <https://base10.vc/research/>
  - <https://unzip.dev>
- Artificial Intelligence (AI) and Machine Learning (ML)
  - Internet of Things (IoT) and Edge Computing
  - Big Data and Data Analytics
  - Cybersecurity and Data Privacy
  - Cloud Computing and Multi-Cloud Strategy
  - Digital Transformation and Innovation
  - Virtual Reality (VR) and Augmented Reality (AR)
  - Blockchain and Cryptocurrency
  - Quantum Computing
  - Automation and Robotic Process Automation (RPA)
  - 5G and Next-Generation Wireless Technologies
  - DevOps and Agile Development
  - Low-Code and No-Code Platforms
  - Voice Search and Voice Assistants
  - E-commerce and Mobile Commerce
  - Digital Marketing and Personalization
  - Omnichannel Customer Experience (CX)
  - Remote Work and Collaboration
  - Sustainable and Green Technologies
  - Digital Health and Telemedicine

[digital](#), [trend](#), [ebook](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/trend/trend>

Last update: **2023/10/24 08:10**





# Adaptive AI

## Adaptive AI

### Gartner Trend: Adaptive AI

Adaptive AI allows for model behavior change post-deployment by using real-time feedback, to continuously retrain models and learn within runtime and development environments, based on new data and adjusted goals, to adapt quickly to changing real-world circumstances.

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

### What is Adaptive AI?

Adaptive AI is a powerful technique that enables models to adjust their behavior dynamically after deployment. Unlike traditional AI systems that rely on static data and predefined goals, adaptive AI systems use real-time feedback from the environment to continuously retrain and improve their models. This way, they can learn from new data and situations, and adapt to changing circumstances and objectives. Adaptive AI can offer significant benefits for applications that require flexibility, resilience, and responsiveness in complex and uncertain domains.

## What is Adaptive AI?

Adaptive AI is an artificial intelligence system that can learn and adjust its behavior based on changing circumstances or feedback. It can optimize its performance over time by analyzing data and adjusting its decision-making process accordingly.

## How does Adaptive AI work?

Adaptive AI works by using machine learning or other techniques to analyze data and learn from it. The AI system can adjust its behavior or output based on this learning, which allows it to improve its performance over time.

## What are some applications of Adaptive AI?

Adaptive AI can be applied in various fields, such as healthcare, finance, and marketing, to improve decision-making and automate tasks. For example, in healthcare, adaptive AI can analyze medical data and help physicians to diagnose diseases more accurately. In finance, adaptive AI can analyze market trends and adjust investment strategies in real-time. In marketing, adaptive AI can analyze customer behavior and adjust marketing campaigns to maximize their effectiveness.

### **What are some benefits of Adaptive AI?**

Adaptive AI can improve decision-making, automate tasks, and optimize performance over time. It can also reduce errors and increase efficiency, leading to cost savings and better outcomes. Additionally, Adaptive AI can be used to address complex and dynamic problems that may be difficult for humans to solve on their own.

### **What are some challenges with Adaptive AI?**

One challenge with Adaptive AI is that it requires large amounts of data to learn from, which can be difficult to obtain in some applications. Additionally, Adaptive AI systems can be difficult to interpret or explain, which can make it difficult to trust their decisions. Finally, there is a risk that Adaptive AI systems may reinforce biases or create unintended consequences if they are not properly designed or monitored.

### **How is Adaptive AI different from other types of AI?**

Adaptive AI is different from other types of AI, such as rule-based or static AI, because it can learn and adjust its behavior over time. This allows it to optimize its performance and adapt to changing circumstances, whereas rule-based or static AI may be limited to a fixed set of rules or behaviors.

[trend](#), [gartner-trend](#), [2023](#), [ai](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/adaptive\\_ai](https://www.almbok.com/trend/adaptive_ai)

Last update: **2023/03/25 21:33**



# AI engineering

## AI engineering

### Gartner Trend: AI engineering

A robust AI engineering strategy will facilitate the performance, scalability, interpretability and reliability of AI models while delivering the full value of AI investments. AI projects often face issues with maintainability, scalability and governance, which makes them a challenge for most organizations.

...

—

<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>

- Prompt Engineering - is a concept in artificial intelligence, particularly natural language processing (NLP).

[trend](#), [gartner-trend](#), [2021](#), [2022](#), [ai](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/ai\\_engineering](https://www.almbok.com/trend/ai_engineering)

Last update: **2023/02/07 10:04**



[Digital Trends](#)

# AI security

## AI security

### Gartner Trend: AI security

Evolving technologies such as hyperautomation and autonomous things offer transformational opportunities in the business world. However, they also create security vulnerabilities in new potential points of attack. Security teams must address these challenges and be aware of how AI will impact the security space.

...

—

<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020>

[trend](#), [gartner-trend](#), [2020](#), [ai](#), [security](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/ai\\_security](https://www.almbok.com/trend/ai_security)

Last update: **2022/08/16 07:26**



# AI TRISM

- AI Trust, Risk and Security Management (AI TRISM)

## What is AI TRISM?

AI TRiSM is a comprehensive solution for managing the lifecycle of AI models in various domains and applications. It helps AI developers and users to ensure that their models are aligned with the principles of governance, trustworthiness, fairness, reliability, robustness, efficacy and data protection. AI TRiSM provides tools and frameworks for assessing, monitoring and improving the quality and performance of AI models across different stages of development and deployment.

AI models are becoming more powerful and ubiquitous in various domains and applications, but they also pose significant challenges and risks for their developers and users. How can you ensure that your AI models are trustworthy, fair, reliable, robust, effective and compliant with data protection regulations? How can you monitor and control the performance and behavior of your AI models throughout their lifecycle? How can you communicate the value and limitations of your AI models to your stakeholders and customers?

These are some of the questions that AI TRiSM can help you answer. AI TRiSM is a comprehensive framework that supports AI model governance, trustworthiness, fairness, reliability, robustness, efficacy and data protection. It provides a set of principles, guidelines, tools and best practices for designing, developing, deploying and maintaining responsible AI systems.

AI TRiSM covers six key aspects of responsible AI:

- **Governance:** how to define roles and responsibilities for managing AI models across different stages and functions
- **Trustworthiness:** how to ensure that AI models are transparent, explainable, accountable and aligned with human values
- **Fairness:** how to prevent or mitigate bias and discrimination in AI models
- **Reliability:** how to ensure that AI models are consistent, accurate and reliable in different contexts and scenarios
- **Robustness:** how to protect AI models from adversarial attacks or unintended consequences
- **Efficacy:** how to measure and improve the quality and impact of AI models
- **Data protection:** how to comply with data privacy laws and ethical standards for collecting, processing and storing data

By adopting AI TRiSM framework, you can benefit from:

- A holistic approach to responsible AI that covers all aspects of the model lifecycle
- A structured methodology that guides you through each step of developing and deploying responsible AI systems
- A flexible toolkit that allows you to choose the most suitable methods and tools for your specific needs
- A collaborative platform that enables you to share best practices and learn from other experts

in the field

## AI TRISM

### Gartner Trend: AI TRISM

AI TRISM supports AI model governance, trustworthiness, fairness, reliability, robustness, efficacy and data protection. It combines methods for explaining AI results, rapidly deploying new models, actively managing AI security, and controls for privacy and ethics issues.

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

[trend](#), [gartner-trend](#), [2023](#), [2024](#), [ai](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/ai\\_trism](https://www.almbok.com/trend/ai_trism)

Last update: **2023/12/26 11:35**



# AI-driven development

## AI-driven development

### Trend No. 3: AI-driven development

AI-driven development looks at tools, technologies and best practices for embedding AI into applications and using AI to create AI-powered tools for the [development process](#). This trend is evolving along three dimensions:

1. **The tools used to build AI-powered solutions are expanding** from tools targeting data scientists (AI infrastructure, AI frameworks and AI platforms) to tools targeting the professional developer community (AI platforms, AI services). With these tools the professional developer can infuse AI powered capabilities and models into an application without involvement of a professional data scientist.
2. **The tools used to build AI-powered solutions are being empowered** with AI-driven capabilities that assist professional developers and automate tasks related to the development of AI-enhanced solutions. Augmented analytics, automated testing, automated code generation and automated solution development will speed the development process and empower a wider range of users to develop applications.
3. **AI-enabled tools are evolving** from assisting and automating functions related to application development (AD) to being enhanced with business domain expertise and automating activities higher on the AD process stack (from general development to business solution design).

The market will shift from a focus on data scientists partnered with developers to developers operating independently using predefined models delivered as a service. This enables more developers to utilize the services, and increases efficiency. These trends are also leading to more mainstream usage of virtual software developers and nonprofessional “citizen application developers.”

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

[almbok.com\\_ai-driven\\_development.mp4](#)

[trend](#), [gartner-trend](#), [2019](#), [ai](#), [dx](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/ai-driven\\_development](https://www.almbok.com/trend/ai-driven_development)

Last update: **2022/08/17 14:46**





# Anywhere operations

## Anywhere operations

### Gartner Trend: Anywhere operations

An anywhere operations model will be vital for businesses to emerge successfully from COVID-19. At its core, this operating model allows for business to be accessed, delivered and enabled anywhere — where customers, employers and business partners operate in physically remote environments.

...

—

<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>

trend, gartner-trend, 2021

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/anywhere\\_operations](https://www.almbok.com/trend/anywhere_operations)

Last update: **2022/08/10 05:43**



[Digital Trends](#) [Gartner Trends](#)

# Applied Observability

## Applied Observability

### Gartner Trend: Applied Observability

Applied Observability works from the data emitted by an organization, using AI to analyze and make recommendations, which allow an enterprise to make faster and more accurate future decisions. When applied systematically, it can reduce the latency for response and optimize business operations in real time.

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

[trend](#), [gartner-trend](#), 2023

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/applied\\_observability](https://www.almbok.com/trend/applied_observability)

Last update: **2023/01/07 12:17**



# Augmented analytics

## Augmented analytics

### Trend No. 2: Augmented analytics

Data scientists now have increasing amounts of data to prepare, analyze and group — and from which to draw conclusions. Given the amount of data, exploring all possibilities becomes impossible. This means businesses can miss key insights from hypotheses the data scientists don't have the capacity to explore. Augmented analytics represents a third major wave for data and analytics capabilities as data scientists use automated algorithms to explore more hypotheses. Data science and machine learning platforms have transformed how businesses generate analytics insight.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

trend, gartner-trend, 2019, analytics

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/augmented\\_analytics](https://www.almbok.com/trend/augmented_analytics)

Last update: **2022/08/17 06:17**



[Digital Trends](#)

# Autonomic Systems

## Autonomic Systems

### Gartner Trend: Autonomic Systems

Autonomic systems are self-managed physical or software systems that learn from their environments and dynamically modify their own algorithms in real time to optimize their behavior in complex ecosystems.

...

— <https://www.gartner.com/en/information-technology/insights/top-technology-trends>

[trend](#), [gartner-trend](#), [2022](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/autonomic\\_systems](https://www.almbok.com/trend/autonomic_systems)

Last update: **2022/08/10 05:43**



# Autonomous things

## Autonomous things

### Trend No. 1: Autonomous things

Whether it's [cars](#), robots or agriculture, autonomous things use AI to perform tasks traditionally done by humans. The sophistication of the intelligence varies, but all autonomous things use AI to interact more naturally with their environments. Autonomous things exist across five types:

- Robotics
- Vehicles
- Drones
- Appliances
- Agents

Those five types occupy four environments: Sea, land, air and digital. They all operate with varying degrees of capability, coordination and intelligence. For example, they can span a drone operated in the air with human-assistance to a farming robot operating completely autonomously in a field. This paints a broad picture of potential applications, and virtually every application, service and IoT object will incorporate some form of AI to automate or augment processes or human actions. Collaborative autonomous things such as drone swarms will increasingly drive the future of AI systems. Explore the possibilities of AI-driven autonomous capabilities in any physical object in your organization or customer environment, but keep in mind these devices are best used for narrowly defined purposes. They do not have the same capability as a human brain for decision making, intelligence or general-purpose learning.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

trend, gartner-trend, 2019, 2020

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/autonomous\\_things](https://www.almbok.com/trend/autonomous_things)

Last update: **2022/08/10 05:43**



## Digital Trends

# Blockchain

## Blockchain

**Trend No. 7: Blockchain**

Blockchain is a type of distributed ledger, an expanding chronologically ordered list of cryptographically signed, irrevocable transactional records shared by all participants in a network. Blockchain allows companies to trace a transaction and work with untrusted parties without the need for a centralized party (i.e., a bank). This greatly reduces business friction and has applications that began in finance, but have expanded to government, healthcare, manufacturing, supply chain and others.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

[trend](#), [gartner-trend](#), [2019](#), [dx](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/trend/blockchain>

Last update: **2022/08/17 14:47**



# Cloud-Native Platforms

## Cloud-Native Platforms

### Gartner Trend: Cloud-Native Platforms

Cloud-native platforms are technologies that allow you to build new application architectures that are resilient, elastic and agile — enabling you to respond to rapid digital change.

...

— <https://www.gartner.com/en/information-technology/insights/top-technology-trends>

trend, gartner-trend, 2022

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/cloud-native\\_platforms](https://www.almbok.com/trend/cloud-native_platforms)

Last update: **2022/08/10 05:43**



[Digital Trends](#)

# Composable Applications

## Composable Applications

### Gartner Trend: Composable Applications

Composable applications are built from business-centric modular components.

Composable applications make it easier to use and reuse code, accelerating the time to market for new software solutions and releasing enterprise value.

...

— <https://www.gartner.com/en/information-technology/insights/top-technology-trends>

[trend](#), [gartner-trend](#), [2022](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/composable\\_applications](https://www.almbok.com/trend/composable_applications)

Last update: **2022/08/10 05:43**





# Cybersecurity mesh

## Cybersecurity mesh

### Gartner Trend: Cybersecurity mesh

Cybersecurity mesh is a distributed architectural approach to scalable, flexible and reliable cybersecurity control. Many assets now exist outside of the traditional security perimeter. Cybersecurity mesh essentially allows for the security perimeter to be defined around the identity of a person or thing. It enables a more modular, responsive security approach by centralizing policy orchestration and distributing policy enforcement. As perimeter protection becomes less meaningful, the security approach of a “walled city” must evolve to current needs.

...

—

<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>

[trend](#), [gartner-trend](#), [2021](#), [2022](#), [security](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/cybersecurity\\_mesh](https://www.almbok.com/trend/cybersecurity_mesh)

Last update: **2022/08/16 14:58**



[Digital Trends](#)

# Data Fabric

## Data Fabric

### Gartner Trend: Data Fabric

Data fabric provides a flexible, resilient integration of data sources across platforms and business users, making data available everywhere it's needed regardless where the data lives.

...

— <https://www.gartner.com/en/information-technology/insights/top-technology-trends>

[trend](#), [gartner-trend](#), 2022

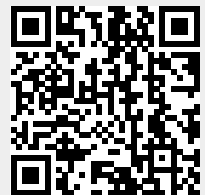
From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/data\\_fabric](https://www.almbok.com/trend/data_fabric)

Last update: **2022/08/10 05:44**



# Decision Intelligence

## Decision Intelligence

### Gartner Trend: Decision Intelligence

Decision intelligence is a practical approach to improve organizational decision making. It models each decision as a set of processes, using intelligence and analytics to inform, learn from and refine decisions.

Decision intelligence can support and enhance human decision making and, potentially, automate it through the use of augmented analytics, simulations and AI.

...

— <https://www.gartner.com/en/information-technology/insights/top-technology-trends>



## Video

Source: [YouTube](#)

### Snippet from [Wikipedia](#): **Decision intelligence**

**Decision intelligence** is an engineering discipline that augments data science with theory from social science, decision theory, and managerial science. Its application provides a framework for best practices in organizational decision-making and processes for applying Artificial Intelligence technologies as machine learning, natural language processing, reasoning and semantics at scale. The basic idea is that decisions are based on our understanding of how actions lead to outcomes. Decision intelligence is a discipline for analyzing this chain of cause and effect, and decision modeling is a visual language for representing these chains.

A related field, **decision engineering**, also investigates the improvement of decision-making processes but is not always as closely tied to data science.

## Creative Commons Attribution-Share Alike 4.0

### Related:

- [Artificial intelligence \(AI\)](#)
- [Business Intelligence](#)
- [Augmented Intelligence](#)

### External links:

- [Is Decision Intelligence The New AI? — \*forbes.com\*](#)
- [Peak's Decision Intelligence Maturity report — \*peak.ai\*](#)

[trend](#), [gartner-trend](#), [2022](#), [ai](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/decision\\_intelligence](https://www.almbok.com/trend/decision_intelligence)

Last update: **2023/05/01 11:42**



# Democratization

## Democratization

### Gartner Trend: Democratization

Democratization of technology means providing people with easy access to technical or business expertise without extensive (and costly) training. It focuses on four key areas — application development, data and analytics, design and knowledge — and is often referred to as “citizen access,” which has led to the rise of citizen data scientists, citizen programmers and more

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020>

[almbok.com\\_trend\\_democratization.mp4](#)

### What is Democratization of Software?

Democratization of software refers to the trend towards making software tools and platforms more widely available and easier to use, so that a wider range of people can use them to create and build things. This can be accomplished through a number of different means, such as offering software as a service (SaaS), making software available for free or at a low cost, or developing user-friendly interfaces that require little or no technical expertise to use. The goal of democratization is often to make it easier for people to access and use software tools, regardless of their technical background or resources. This can have the effect of enabling more people to create and innovate, which can drive economic growth and social progress.

### Related:

- [Citizen Development](#)
- [Citizen Developer](#)

[trend](#), [gartner-trend](#), [2020](#), [dx](#), [citdev](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/trend/democratization>

Last update: **2023/01/07 12:13**



# Digital ethics and privacy

## Digital ethics and privacy

### Trend No. 9: Digital ethics and privacy

Consumers have an growing awareness of the value of their personal information, and they are increasingly concerned with how it's being used by public and private entities. Enterprises that don't pay attention are at risk of consumer backlash. Conversations regarding privacy must be grounded in ethics and trust.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

trend, gartner-trend, 2019, digital

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/digital\\_ethics\\_and\\_privacy](https://www.almbok.com/trend/digital_ethics_and_privacy)

Last update: **2022/08/16 13:12**



[Digital Trends](#) [Gartner Trends](#)

# Digital Immune System

## Digital Immune System

### Gartner Trend: Digital Immune System

Digital Immune System creates an enhanced customer experience by combining multiple software engineering strategies to protect against risk. Through observability, automation, and extreme design and testing, it delivers resilient systems that mitigate operational and security risks.

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

### What is Digital Immune System?

Digital immune system refers to a set of technologies and practices that are designed to detect and respond to cyber threats in real-time, in order to protect digital assets, systems, and networks from attacks. It involves using advanced analytics, machine learning, and artificial intelligence to monitor and analyze network traffic, identify anomalies and potential threats, and automatically respond to those threats with appropriate measures such as isolating infected devices or blocking malicious traffic. The goal is to create a more resilient and adaptive security framework that can continuously detect, analyze, and respond to emerging cyber threats.

[trend](#), [gartner-trend](#), [2023](#), [security](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/digital\\_immune\\_system](https://www.almbok.com/trend/digital_immune_system)

Last update: **2023/03/30 16:18**





# Digital twins

## Digital twins

### Trend No. 4: Digital twins

A **digital twin** is a digital representation that mirrors a real-life object, process or system. Digital twins can also be linked to create twins of larger systems, such as a power plant or city. The idea of a digital twin is not new. It goes back to computer-aided design representations of things or online profiles of customers, but today's digital twins are different in four ways:

1. The robustness of the models, with a focus on how they support specific business outcomes
2. The link to the real world, potentially in real time for monitoring and control
3. The application of advanced big data analytics and AI to drive new business opportunities
4. The ability to interact with them and evaluate "what if" scenarios

The focus today is on **digital twins in the IoT**, which could improve enterprise decision making by providing information on maintenance and reliability, insight into how a product could perform more effectively, data about new products and increased efficiency. Digital twins of an organization are emerging to create models of organizational process to enable real time monitoring and drive improved process efficiencies.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

trend, gartner-trend, 2019, digital

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/digital\\_twins](https://www.almbok.com/trend/digital_twins)

Last update: **2022/08/16 13:12**



[Digital Trends](#)

# Distributed cloud

## Distributed cloud

### Gartner Trend: Distributed cloud

Distributed cloud is where cloud services are distributed to different physical locations, but the operation, governance and evolution remain the responsibility of the public cloud provider.

...

<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>

[trend](#), [gartner-trend](#), [2021](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/distributed\\_cloud](https://www.almbok.com/trend/distributed_cloud)

Last update: **2022/08/10 05:44**



# Distributed Enterprises

## Distributed Enterprises

### Gartner Trend: Distributed Enterprises

Distributed enterprises reflect a digital-first, remote-first business model to improve employee experiences, digitalize consumer and partner touchpoints, and build out product experiences.

...

— <https://www.gartner.com/en/information-technology/insights/top-technology-trends>

trend, gartner-trend, 2022, enterprise

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/distributed\\_enterprises](https://www.almbok.com/trend/distributed_enterprises)

Last update: **2022/08/17 12:45**



## Digital Trends

# Empowered edge

## Empowered edge

### Trend No. 5: Empowered edge

Edge computing is a topology where information processing and content collection and delivery are placed closer to the sources of the information, with the idea that keeping traffic local will reduce latency. Currently, much of the focus of this technology is a result of the need for IoT systems to deliver disconnected or distributed capabilities into the embedded IoT world. This type of topology will address challenges ranging from high WAN costs and unacceptable levels of latency. Further, it will enable the specifics of digital business and IT solutions.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

trend, gartner-trend, 2019

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/empowered\\_edge](https://www.almbok.com/trend/empowered_edge)

Last update: **2022/08/10 05:43**



- [Digital Trends](#)
- [Gartner](#)
- [GitHub](#)
- [PMI Megatrends](#)

# Gartner

## Gartner Top Strategic Technology trends

The Gartner Top Strategic Technology trends highlight changing or not yet widely recognized trends that will impact and transform industries through.

### 2024

- Trend 1: [AI Trust, Risk and Security Management \(AI TRiSM\)](#)
- Trend 2: [Continuous Threat Exposure Management \(CTEM\)](#)
- Trend 3: [Sustainable Technology](#)
- Trend 4: [Platform Engineering](#)
- Trend 5: [AI-Augmented Development](#)
- Trend 6: [Industry Cloud Platforms](#)
- Trend 7: [Intelligent Applications](#)
- Trend 8: [Democratized Generative AI](#)
- Trend 9: [Augmented Connected Workforce](#)
- Trend 10: [Machine Customers](#)

Source: [Gartner](#)

### 2023

- Trend 1: [Digital Immune System](#)
- Trend 2: [Applied Observability](#)
- Trend 3: [AI TRISM](#)
- Trend 4: [Industry Cloud Platforms](#)
- Trend 5: [Platform Engineering](#)
- Trend 6: [Wireless-Value Realization](#)
- Trend 7: [Superapps](#)
- Trend 8: [Adaptive AI](#)
- Trend 9: [Metaverse](#)
- Trend 10: [Sustainable Technology](#)

Source: [Gartner](#)

### 2022

- Trend 1: [Data Fabric](#)
- Trend 2: [Cybersecurity mesh](#)
- Trend 3: [Privacy-Enhancing Computation](#)

- Trend 4: [Cloud-Native Platforms](#)
- Trend 5: [Composable Applications](#)
- Trend 6: [Decision Intelligence](#)
- Trend 7: [Hyperautomation](#)
- Trend 8: [AI engineering](#)
- Trend 9: [Distributed Enterprises](#)
- Trend 10: [Total experience](#)
- Trend 11: [Autonomic Systems](#)
- Trend 12: [Generative AI](#)

Source: [Gartner](#)

## 2021

- Trend 1: [Internet of Behaviors](#)
- Trend 2: [Total experience](#)
- Trend 3: [Privacy-enhancing computationn](#)
- Trend 4: [Distributed cloud](#)
- Trend 5: [Anywhere operations](#)
- Trend 6: [Cybersecurity mesh](#)
- Trend 7: [Intelligent composable business](#)
- Trend 8: [AI engineering](#)
- Trend 9: [Hyperautomation](#)

Source: [Gartner](#)

## 2020

- Trend No. 1: [Hyperautomation](#)
- Trend No. 2: [Multiexperience](#)
- Trend No. 3: [Democratization](#)
- Trend No. 4: [Human augmentation](#)
- Trend No. 5: [Transparency and traceability](#)
- Trend No. 6: [The empowered edge](#)
- Trend No. 7: [The distributed cloud](#)
- Trend No. 8: [Autonomous things](#)
- Trend No. 9: [Practical blockchain](#)
- Trend No. 10: [AI security](#)

Source: [Gartner](#)

## 2019

- Trend No. 1: [Autonomous things](#)
- Trend No. 2: [Augmented analytics](#)
- Trend No. 3: [AI-driven development](#)
- Trend No. 4: [Digital twins](#)
- Trend No. 5: [Empowered edge](#)
- Trend No. 6: [Immersive technologies](#)

- Trend No. 7: [Blockchain](#)
- Trend No. 8: [Smart spaces](#)
- Trend No. 9: [Digital ethics and privacy](#)
- Trend No. 10: [Quantum computing](#)

Source: [Gartner](#)

[trend](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/trend/gartner-trends>

Last update: **2023/10/18 10:12**



## Digital Trends

# Generative AI

GenAI for short.

### Generative AI

#### Gartner Trend: Generative AI

Generative AI learns about artifacts from data, and generates innovative new creations that are similar to the original but doesn't repeat it.

Generative AI has the potential to create new forms of creative content, such as video, and accelerate R&D cycles in fields ranging from medicine to product creation.

...

— <https://www.gartner.com/en/information-technology/insights/top-technology-trends>



## Video

Source: [YouTube](#)

#### What is Generative AI?

Generative AI is a branch of artificial intelligence that focuses on creating new data or content from existing data or content. Generative AI can produce realistic images, texts, sounds, videos and more, based on the patterns and features learned from the input data.

One of the most popular applications of generative AI is deepfake, which is the process of swapping faces or voices in videos or audio clips. Deepfake can be used for entertainment purposes, such as creating celebrity parodies or impersonations. However, it can also pose ethical and social challenges, such as spreading misinformation or violating privacy.

Another example of generative AI is text generation, which is the task of producing natural language texts from a given prompt or context. Text generation can be used for various



purposes, such as summarizing articles, writing captions, generating headlines, composing poems or stories and more. Text generation can also enhance human creativity and productivity by providing suggestions or alternatives.

Generative AI relies on different techniques and models to achieve its goals. One of the most common techniques is generative adversarial networks (GANs), which consist of two competing neural networks: a generator and a discriminator. The generator tries to create fake data that looks like the real data, while the discriminator tries to distinguish between the real and fake data. The generator learns from its mistakes and improves over time.

[what\\_is\\_generative\\_ai.mp3](#)

### GenAI:

- [Adobe Firefly](#) [ai-tools](#), [ai](#), [ai-image](#), [ai-design](#), [genai](#)
- [ChatGPT](#) [kb](#), [ai](#), [chatbot](#), [ai-tools](#), [ai-text](#), [ai-code](#), [programming](#), [devopscreate](#), [genai](#)
- [CodeWhisperer](#) [ai-tools](#), [ai](#), [genai](#), [ai-code](#)
- [DALL·E 2](#) [kb](#), [ai](#), [ai-image](#), [ai-tools](#), [genai](#)
- [GitHub Copilot](#) [tool](#), [programming](#), [ai](#), [ai-code](#), [ai-tools](#), [genai](#), [copilot](#), [copilot-dev](#)
- [Microsoft 365 Copilot](#) [o365](#), [ai](#), [ai-tools](#), [ai-productivity](#), [genai](#), [copilot](#)
- [Midjourney](#) [ai-tools](#), [ai](#), [ai-image](#), [genai](#)

### Related:

- [AI \(Tools, Trends and more...\)](#)
- [Artificial intelligence \(AI\)](#)

### External links:

- [Base11 Research Generative AI — base10.vc](#)
- [Generative AI Prompts Productivity, Imagination, And Innovation In The Enterprise — forrester.com](#)

[trend](#), [gartner-trend](#), [2022](#), [ai](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/generative\\_ai](https://www.almbok.com/trend/generative_ai)

Last update: **2024/04/06 19:12**





- [Digital Trends](#)
- [Gartner](#)
- [GitHub](#)
- [PMI Megatrends](#)

# GitHub

GitHub is a platform for software development and collaboration that hosts millions of open-source projects and repositories. As such, it is an excellent source of information on digital trends in software development and technology.

## GitHub

- <https://github.com/trending>
- <https://github.com/trending/developers>

[trend](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/trend/github-trends>

Last update: **2023/03/25 11:04**



## Digital Trends

# Human augmentation

### Human augmentation

#### Gartner Trend: Human augmentation

Human augmentation is the use of technology to enhance a person's cognitive and physical experiences.

Physical augmentation changes an inherent physical capability by implanting or hosting a technology within or on the body. For example, the automotive or mining industries use wearables to improve worker safety. In other industries, such as retail and travel, wearables are used to increase worker productivity.

Physical augmentation falls into four main categories: Sensory augmentation (hearing, vision, perception), appendage and biological function augmentation (exoskeletons, prosthetics), brain augmentation (implants to treat seizures) and genetic augmentation (somatic gene and cell therapy).

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020>

trend, gartner-trend, 2020

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/human\\_augmentation](https://www.almbok.com/trend/human_augmentation)

Last update: **2022/08/10 05:44**



# Hyperautomation

Hyperautomation is the use of advanced technologies, such as artificial intelligence and machine learning, to automate and optimize complex business processes.

## Hyperautomation

### Gartner Trend: Hyperautomation

Hyperautomation deals with the application of advanced technologies, including artificial intelligence (AI) and machine learning (ML), to increasingly automate processes and augment humans. Hyperautomation extends across a range of tools that can be automated, but also refers to the sophistication of the automation (i.e., discover, analyze, design, automate, measure, monitor, reassess.)

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020>

[almbok.com\\_hyperautomation.mp4](#)

## Examples of Hyperautomation

- **Robotic process automation (RPA):** Using software robots to automate repetitive tasks, such as data entry and form processing.
- **Intelligent process automation (IPA):** Combining RPA with artificial intelligence and machine learning to automate more complex processes that involve decision-making.
- **Chatbots and virtual assistants:** Using natural language processing to create chatbots and virtual assistants that can handle customer queries and provide personalized support.
- **Business process management (BPM):** Using software to manage and automate end-to-end business processes, from customer onboarding to invoice processing.
- **Machine learning and predictive analytics:** Using algorithms to analyze data and identify patterns, which can then be used to automate decision-making processes.
- **Cognitive automation:** Using artificial intelligence to replicate human cognitive processes, such as learning, problem-solving, and decision-making.
- **Optical character recognition (OCR):** Using software to extract text from scanned documents, images, and PDFs, which can then be used to automate data entry and other processes.
- **Workflow automation:** Using software to manage and automate workflows, from approvals to task assignments and notifications.
- **Application programming interfaces (APIs):** Using APIs to connect different systems and

automate data transfer and integration between them.

Automation:

• Bash

tool, maintenance, ci, automation

• Build automation

method, programming, devopscreate, ci, automation

• Continuous configuration automation

method, devopsconfigure, maintenance, ci, automation

• Database Automation

method, data, devopsrelease, maintenance, ci, release, dev-db, automation

• Hyperautomation

trend, gartner-trend, 2020, 2021, 2022, skill, dx, automation, hot, ai

• Intelligent Process Automation (IPA)

kb, architecture, skill, ci, automation, acronym

• Power Automate

o365, mobile, lowcode, nocode, powerplatform, automation, citdev, integration

• PowerShell

tool, programming, maintenance, release, automation

• Robotic Process Automation (RPA)

method, architecture, programming, acronym, skill, dx, automation

• Test automation

tool, programming, test, devopsverify, skill, automation

trend, gartner-trend, 2020, 2021, 2022, skill, dx, automation, hot, ai

## ToDo ##

Fix Me!

- Support Us... →

- Robotic Process Automation (RPA)
- Artificial Intelligence (AI)
- Machine Learning (ML)
- Natural Language Processing (NLP)
- Business Process Management (BPM)
- Intelligent Document Processing (IDP)
- Chatbots and Virtual Assistants
- Process Mining
- Low-Code and No-Code Platforms
- Intelligent Automation
- Automation Anywhere
- UiPath
- Blue Prism
- Cognitive Automation
- Process Orchestration
- Digital Process Automation
- Intelligent Robotic Process Automation
- Hyperautomation Strategy
- Hyperautomation Framework

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/trend/hyperautomation>

Last update: **2023/05/01 18:22**



## Digital Trends

# Immersive technologies

### Immersive technologies

#### Trend No. 6: Immersive technologies

Through 2028, conversational platforms, which change how users interact with the world, and technologies such as augmented reality (AR), mixed reality (MR) and virtual reality (VR), which change how users perceive the world, will lead to a new immersive experience. AR, MR and VR show potential for increased productivity, with the next generation of VR able to sense shapes and track a user's position and MR enabling people to view and interact with their world.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

trend, gartner-trend, 2019

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/immersive\\_technologies](https://www.almbok.com/trend/immersive_technologies)

Last update: **2022/08/10 05:43**





# Industry Cloud Platforms

## Industry Cloud Platforms

### Gartner Trend: Industry Cloud Platforms

Industry Cloud Platforms combine SaaS, PaaS and IaaS with tailored, industry-specific functionality that organizations can use to more easily adapt to the relentless stream of disruptions in their industry.

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

trend, gartner-trend, 2023, 2024

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/industry\\_cloud\\_platforms](https://www.almbok.com/trend/industry_cloud_platforms)

Last update: **2023/12/26 11:36**



[Digital Trends](#)

# Intelligent composable business

## Intelligent composable business

### Gartner Trend: Intelligent composable business

An intelligent composable business is one that can adapt and fundamentally rearrange itself based on a current situation. As organizations accelerate digital business strategy to drive faster digital transformation, they need to be agile and make quick business decisions informed by currently available data.

...

—

<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>

[trend](#), [gartner-trend](#), [2021](#)

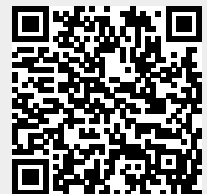
From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/intelligent\\_composable\\_business](https://www.almbok.com/trend/intelligent_composable_business)

Last update: **2022/08/10 05:43**



# Internet of Behaviors

## Internet of Behaviors

### Gartner Trend: Internet of Behaviors

As demonstrated by the COVID-19 protocol monitoring example, the IoB is about using data to change behaviors. With an increase in technologies that gather the “digital dust” of daily life — data that spans the digital and physical worlds — that information can be used to influence behaviors through feedback loops.

...

—

<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>

[trend](#), [gartner-trend](#), [2021](#), [internet](#)

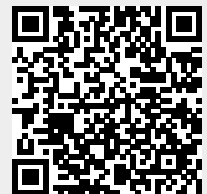
From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/internet\\_of\\_behaviors](https://www.almbok.com/trend/internet_of_behaviors)

Last update: **2022/08/16 19:44**



# Metaverse

## Metaverse

### Gartner Trend: Metaverse

Metaverse allows people to replicate or enhance their physical activities. This could happen by transporting or extending physical activities to a virtual world or by transforming the physical one. It is a combinatorial innovation made up of multiple technology themes and capabilities

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

### What is Metaverse?

The **Metaverse** is a term used to describe a **hypothetical future version of the internet** that is a fully immersive, shared virtual space where people can interact with a computer-generated environment and each other in real-time. It is often compared to the science fiction concept of a virtual reality or cyberspace, but with the added dimension of social interaction and collaboration.

In the metaverse, **people would use virtual reality (VR) and augmented reality (AR) technology to interact with a digital world** that is designed to look and feel like the physical world. This world would be persistent and interconnected, meaning that people could move seamlessly from one virtual environment to another, and interact with other users and objects in real-time. The metaverse could be used for a variety of purposes, such as gaming, socializing, shopping, education, and even work.

### Related:

- [Metaverse](#)

[trend](#), [gartner-trend](#), [2023](#)

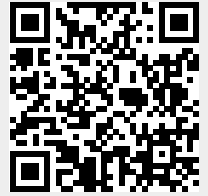
From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/trend/metaverse>

Last update: **2023/03/30 16:23**



[Digital Trends](#)

# Multiexperience

## Multiexperience

### Gartner Trend: Multiexperience

Multiexperience replaces technology-literate people with people-literate technology. In this trend, the traditional idea of a computer evolves from a single point of interaction to include multisensory and multitouchpoint interfaces like wearables and advanced computer sensors.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020>

[trend](#), [gartner-trend](#), [2020](#), [devx](#)

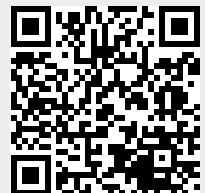
From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/trend/multiexperience>

Last update: **2022/08/17 14:48**



# Platform Engineering

## Platform Engineering

### Gartner Trend: Platform Engineering

Platform Engineering provides a curated set of tools, capabilities and processes that are packaged for easy consumption by developers and end users. It will increase end users' productivity and reduce the burden on development teams.

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

### What is Platform Engineering?

Platform engineering is the practice of building and maintaining a technology platform, typically a software platform, that supports the development and delivery of other applications and services. The platform typically provides a set of common infrastructure, services, and tools that can be used by other developers to build and deploy their own applications or services. Platform engineering involves designing and building scalable, reliable, and secure platforms that can meet the needs of multiple stakeholders, such as developers, users, and business owners. It also involves implementing best practices around automation, monitoring, testing, and continuous delivery to ensure the platform is stable, efficient, and resilient.

[trend](#), [gartner-trend](#), [2023](#), [2024](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/platform\\_engineering](https://www.almbok.com/trend/platform_engineering)

Last update: **2023/12/26 11:36**



- [Digital Trends](#)
- [Gartner](#)
- [GitHub](#)
- [PMI Megatrends](#)

## PMI Megatrends

- <https://www.pmi.org/learning/thought-leadership/megatrends>
- <https://www.pmi.org/learning/thought-leadership>
- <https://www.pmi.org/brightcove/player/index?properties=controls&id=6303362174001>

[trend](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/trend/pmi-trends>

Last update: **2022/08/17 09:04**





# Practical blockchain

## Practical blockchain

### Gartner Trend: Practical blockchain

Blockchain is a type of distributed ledger, an expanding chronologically ordered list of cryptographically signed, irrevocable transactional records shared by all participants in a network.

...

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020>

trend, gartner-trend, 2020

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/practical\\_blockchain](https://www.almbok.com/trend/practical_blockchain)

Last update: **2022/08/10 05:43**



[Digital Trends](#)

# Privacy-enhancing computation

## Privacy-enhancing computation

### Gartner Trend: Privacy-enhancing computation

Privacy-enhancing computation features three technologies that protect data while it's being used. The first provides a trusted environment in which sensitive data can be processed or analyzed. The second performs processing and analytics in a decentralized manner. The third encrypts data and algorithms before processing or analytics.

...

—

<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>

[trend](#), [gartner-trend](#), [2021](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/privacy-enhancing\\_computatio](https://www.almbok.com/trend/privacy-enhancing_computatio)

Last update: **2022/08/10 05:43**



# Privacy-Enhancing Computation

## Privacy-Enhancing Computation

### Gartner Trend: Privacy-Enhancing Computation

Privacy-enhancing computation secures the processing of personal data in untrusted environments — which is increasingly critical due to evolving privacy and data protection laws as well as growing consumer concerns.

...

— <https://www.gartner.com/en/information-technology/insights/top-technology-trends>

trend, gartner-trend, 2022

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/privacy-enhancing\\_computation](https://www.almbok.com/trend/privacy-enhancing_computation)

Last update: **2022/08/10 05:44**



## Digital Trends

# Quantum computing

## Quantum computing

**Trend No. 10: Quantum computing**

Quantum computing is a type of nonclassical computing that is based on the quantum state of subatomic particles that represent information as elements denoted as quantum bits or “qubits.” Quantum computers are an exponentially scalable and highly parallel computing model. A way to imagine the difference between traditional and quantum computers is to imagine a giant library of books.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

trend, gartner-trend, 2019

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/quantum\\_computing](https://www.almbok.com/trend/quantum_computing)

Last update: **2022/08/10 05:43**



# Smart spaces

## Smart spaces

### Trend No. 8: Smart spaces

A smart space is a physical or digital environment in which humans and technology-enabled systems interact in increasingly open, connected, coordinated and intelligent ecosystems. As technology becomes a more integrated part of daily life, smart spaces will enter a period of accelerated delivery.

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019>

trend, gartner-trend, 2019

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/smart\\_spaces](https://www.almbok.com/trend/smart_spaces)

Last update: **2022/08/10 05:43**



## Hot Topics Gartner Trends

# Superapps

Superapps are mobile applications that offer a wide range of features and services beyond what is traditionally associated with a single app, aiming to become a one-stop-shop for users.

## Superapps

### Gartner Trend: Superapps

Superapps are more than composite applications that aggregate services. A superapp combines the features of an app, a platform and an ecosystem in one application, providing a platform for third parties to develop and publish their own miniapps on.

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

**Superapps** is a term used to describe **mobile applications that offer a wide range of features and services**, typically beyond what is traditionally associated with a single app. Superapps aim to become a **one-stop-shop** for users, offering a seamless experience for multiple activities, from communication to entertainment, e-commerce, and more.

Superapps are usually associated with large tech companies in Asia, such as **WeChat, Grab, and Gojek**. WeChat, for example, started as a messaging app but has since expanded to include services like mobile payments, e-commerce, ride-hailing, food delivery, and more. This all-in-one approach has made WeChat an essential app for millions of users in China.

Superapps are designed to **make users lives easier** by eliminating the need to download and manage multiple apps for different purposes. Instead, users can access a range of services and features from within a single app, simplifying their daily routine. In addition, superapps offer opportunities for companies to reach a wider audience and engage with customers in new ways.

While superapps are still relatively new, they are expected to become increasingly popular in the future, especially as mobile technology advances and consumers demand more convenience and integration in their digital experiences.

## Enterprise superapps

**Enterprise superapps** are similar to consumer superapps, but they are designed specifically for use within a business or organization. These apps provide a range of features and services that allow employees to perform their job functions more efficiently and effectively.

Enterprise superapps can **help businesses to streamline their operations, improve**

**collaboration between teams, and enhance the overall employee experience.** They may include features such as:

- Communication and collaboration tools
- HR and payroll management
- Customer relationship management
- Business analytics and reporting
- Inventory management
- Training and development

Enterprise superapps can be particularly useful for businesses with distributed teams or remote workers. They can help to improve communication and collaboration, and ensure that employees have access to the tools and information they need to do their jobs effectively.

Examples of Enterprise Superapps:

- Microsoft Teams
- Salesforce
- Workday
- ServiceNow
- Zoom
- Slack

#### Superapps:

- [Microsoft Teams o365, desktop, online, mobile, superapp](#)
- [Slack tool, projects, superapp](#)
- [WeChat kb, superapp](#)

#### Related:

- [citdev - Citizen Development](#)
- [lowcode - Low-code development](#)
- [Microsoft Teams](#)
- [Collaborative Applications](#)
- [Composable Architecture](#)

#### External links:

- [What Is a Superapp? — gartner.com](#)
- [5 Examples Of Super Apps Successful Case — agiletech.medium.com](#)

[trend](#), [gartner-trend](#), [2023](#), [citdev](#), [hot](#)

## ## ToDo ##

•  - [Support Us...](#) →

- All-in-one Platforms
- Multi-purpose Apps
- Ecosystems
- Mini Programs
- Payment Services
- Social Networking
- Delivery Services
- Superapp Economy
- Digital Wallets
- Gaming Services
- Ride-Hailing Services
- Chat and Messaging
- Health and Fitness
- Food and Beverage
- E-commerce
- Banking and Financial Services
- Travel and Tourism
- Media and Entertainment
- Personalization and Customization
- Superapp Strategy

From:  
<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:  
<https://www.almbok.com/trend/superapps>

Last update: **2023/08/17 12:12**





# Sustainable Technology

## Sustainable Technology

### Gartner Trend: Sustainable Technology

Sustainable technology is a framework of solutions that increases the energy and efficiency of IT services; enables enterprise sustainability through technologies like traceability, analytics, emissions management software and AI; and helps customers achieve their own sustainability objectives.

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

### What is Sustainable Technology?

Sustainable technology refers to the use of technology to support sustainable development, which aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable technology includes a wide range of practices, processes, and products that are designed to minimize negative environmental impacts, conserve resources, and promote social and economic sustainability. Examples of sustainable technology include renewable energy systems, green buildings, sustainable agriculture practices, water conservation technologies, and waste reduction and recycling systems. Sustainable technology also involves designing products and services that are energy-efficient, resource-efficient, and have a minimal carbon footprint throughout their lifecycle.

Examples of Sustainable Technology:

- Renewable energy systems, such as solar panels, wind turbines, and hydroelectric power plants, that generate electricity without producing greenhouse gas emissions.
- Green buildings, which use sustainable building materials, energy-efficient systems, and natural ventilation to reduce energy consumption and greenhouse gas emissions.
- Sustainable agriculture practices, such as agroforestry, crop rotation, and organic farming, which promote soil health, reduce water consumption, and minimize the use of synthetic fertilizers and pesticides.
- Water conservation technologies, such as drip irrigation and rainwater harvesting systems, which help to conserve water and reduce the strain on water resources.
- Waste reduction and recycling systems, such as composting, waste-to-energy systems, and closed-loop manufacturing processes, which reduce the amount of waste that is sent to landfills and promote the circular economy.
- Electric vehicles and alternative fuel vehicles, which reduce the use of fossil fuels and lower greenhouse gas emissions from the transportation sector.

- Energy-efficient appliances and lighting systems, which reduce energy consumption and lower greenhouse gas emissions from residential and commercial buildings.

[trend](#), [gartner-trend](#), [2023](#), [2024](#)

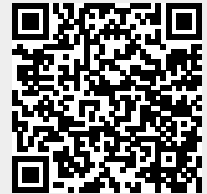
From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/sustainable\\_technology](https://www.almbok.com/trend/sustainable_technology)

Last update: **2023/12/26 11:35**



# The distributed cloud

## The distributed cloud

### Gartner Trend: The distributed cloud

Distributed cloud refers to the distribution of public cloud services to locations outside the cloud provider's physical data centers, but which are still controlled by the provider. In distributed cloud, the cloud provider is responsible for all aspects of cloud service architecture, delivery, operations, governance and updates. The evolution from centralized public cloud to distributed public cloud ushers in a new era of cloud computing.

...

—

<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020>

trend, gartner-trend, 2020

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/the\\_distributed\\_cloud](https://www.almbok.com/trend/the_distributed_cloud)

Last update: **2022/08/10 05:43**



## Digital Trends

# The empowered edge

### The empowered edge

#### Gartner Trend: The empowered edge

Edge computing is a topology where information processing and content collection and delivery are placed closer to the sources of the information, with the idea that keeping traffic local and distributed will reduce latency. This includes all the technology on the Internet of Things (IoT). Empowered edge looks at how these devices are increasing and forming the foundations for smart spaces, and moves key applications and services closer to the people and devices that use them.

...

—

<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020>

[trend](#), [gartner-trend](#), [2020](#), [iot](#), [dx](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/the\\_empowered\\_edge](https://www.almbok.com/trend/the_empowered_edge)

Last update: **2022/08/17 14:47**



# Total experience

## Total experience

### Gartner Trend: Total experience

Total experience combines multiexperience, customer experience, employee experience and user experience to transform the business outcome. The goal is to improve the overall experience where all of these pieces intersect, from technology to employees to customers and users.

...  
—

<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>

### Related:

- [Employee Experience](#)
- [Developer Experience](#)

### External links:

- [What is Total Experience? — walkme.com](#)

[trend](#), [gartner-trend](#), [2021](#), [2022](#), [devx](#), [dx](#), [ex](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/total\\_experience](https://www.almbok.com/trend/total_experience)

Last update: **2023/01/11 09:08**



[Digital Trends](#)

# Transparency and traceability

## Transparency and traceability

### Gartner Trend: Transparency and traceability

The evolution of technology is creating a trust crisis. As consumers become more aware of how their data is being collected and used, organizations are also recognizing the increasing liability of storing and gathering the data.

...

—  
<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020>

[trend](#), [gartner-trend](#), [2020](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/transparency\\_and\\_traceability](https://www.almbok.com/trend/transparency_and_traceability)

Last update: **2022/08/10 05:43**



# Wireless-Value Realization

## Wireless-Value Realization

### Gartner Trend: Wireless-Value Realization

Wireless-Value Realization covers the provision of wireless network services from everything, including traditional end-user computing, support for edge devices, digital tagging solutions, etc. Such networks go well beyond pure connectivity, providing location and other real-time information and insight from analytics, and allow systems to harvest network energy directly.

...

— <https://www.gartner.com/en/articles/gartner-top-10-strategic-technology-trends-for-2023>

### What is Wireless-Value Realization?

Wireless-value realization is the process of **leveraging wireless technologies to achieve business objectives and deliver value** to customers, employees, and stakeholders. It involves identifying and implementing wireless solutions that can improve operational efficiency, enhance customer engagement, and generate new revenue streams.

Wireless-value realization encompasses a range of activities, including identifying wireless technology opportunities, assessing the feasibility and cost-effectiveness of wireless solutions, designing and implementing wireless infrastructure and applications, and measuring the impact of wireless solutions on business performance. It requires collaboration between different teams and stakeholders, including IT, business, and operations, to ensure that wireless solutions are aligned with business goals and are delivering measurable value.

Examples of wireless-value realization include deploying wireless sensors and monitoring systems to optimize manufacturing processes, using mobile devices and applications to improve customer engagement and service delivery, and implementing wireless payment systems to streamline transactions and improve customer convenience. By realizing the value of wireless technologies, businesses can gain a competitive advantage, improve customer satisfaction, and achieve sustainable growth.

trend, gartner-trend, 2023

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

[https://www.almbok.com/trend/wireless-value\\_realization](https://www.almbok.com/trend/wireless-value_realization)

Last update: **2023/03/30 16:25**

