2021 Cool Vendors Must Build Trust With Digital Innovation, Competence and Ethics — A Gartner Trend Insight Report

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In a postpandemic world, trust is in short supply, which disproportionately impacts adoption of unproven technologies. To address uncertainty, CIOs should evaluate Cool Vendors that demonstrate acuity in digital innovation, competence and ethics when pursuing new technologies for digital business.

Overview

Opportunities and Challenges

- Trust in businesses, governments and institutions continues to plummet, with the greatest decline seen in the technology sector, according to the 2020 Edelman Trust Barometer.

- Organizations remain skeptical of vendor claims of value without verifiable proof points. At every stage of the buying journey, end users must look beyond sales-provided references and seek their own references via social channels and influencers.

- Proofs of concept (POCs) and limited trials of emerging tech will continue, but CIOs will seek to minimize the uncertainties and risks of Cool Vendor offerings in the short term.

What You Need to Know

To exploit disruptive trends and emerging practices, CIOs must:

- Deploy customer and social analytics to evaluate the trust levels in all operations, and ensure the information is available across the organization. Use internal processes to track reputational information and feedback whenever possible.
Insight From the Experts

Innovation, Competence and Ethics Build Trust

Although global CIOs made significant advances in digital business acceleration in 2020, pandemic conditions continue. As digital innovation remains varied across different countries, organizations that fail to exploit new technologies risk losing critical opportunities. According to the Gartner 2021 CIO Agenda: Seize This Opportunity for Digital Business Acceleration, an enterprise is 2.7 times more likely to be a top-performing organization when it increases innovation funding.

The 2021 Cool Vendors are best-positioned to benefit from CIOs’ increased innovation funding. However, trust levels for the technology sector are already at a record low. But, a third of respondents in Gartner's 2021 Technology End-User Buying Behavior Survey said they would either accept the risks and costs of new technology or pursue vendor beta programs or co-development opportunities. In addition, six in 10 respondents indicated their organizations will either wait for mature, proven technology to adopt or select service packs before deploying new technology. Thus, there remains a significant proportion of organizations for our Cool Vendors to convince to purchase their products. Moreover, Cool Vendors always face additional scrutiny when it comes to demonstrating tangible and substantiated business value — and organizations remain ever skeptical of vendor claims.

To build the trust of prospective buyers, Cool Vendors must first provide innovations that are empathetic to organizations’ digital business objectives. Then, Cool Vendors need to manifest these attributes with greater competence than established vendors and in an ethical manner (see Figure 1) to gain buyer trust.

- Elevate the criticality of security, risk and privacy in all assessments of new investments involving disruptive technology, regardless of who is sponsoring and funding such investments.

- Proactively seek vendors that address inherent risks. These vendors do so by emphasizing empathic innovation, solution competence and economic terms that demonstrate shared risk and commitment.

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Figure 1: Cool Vendor Attributes for Building for Greater Trust

**Cool Vendor Attributes for Building for Greater Trust**

- **Ethics**
  - Ethical AI
  - Greater Security and Transparency
  - Improving Customer Relations

- **Competence**
  - Improved Delivery
  - Operational Gains
  - Enabling New Ways of Working

- **Innovation**
  - Extracting New Insights
  - Immersive Experiences
  - Accelerated Development

In this Trend Insight report, we'll explore how Cool Vendors are:

- **Highlighting their competence** through improved delivery of service, operational gains, and enabling new ways of working
- **Innovating by extracting** new user insights and immersive experiences through accelerated development
- **Making the use of new technologies more ethical**, secure and safe to reduce personal, business and societal vulnerabilities

**Executive Overview**

Cool vendors represent an opportunity to explore new or emerging technologies that occur earlier in the Gartner Hype Cycle (see Understanding Gartner’s Hype Cycles). Many are pioneers in emerging markets, such as those featured on the post-trigger position of the Gartner Hype Cycle.
When considering technologies for an early-stage proof of concept, CIOs and their organizations may assume more risk, but their skepticism requires substantiation of vendor claims. Cool vendors represent an attractive entry point to build or expand organizational capabilities for digital business. In a low-trust environment, CIOs will look beyond vendors’ sales-provided reference customers and seek out their own references via other channels and influencers throughout all stages of their buying journey.

Using innovation to respond, recover and renew after the global pandemic has become a critical priority for most organizations across industries and risk profiles. Taking greater risks by turning to small, innovative vendors to change the game was once a luxury reserved only for early adopters. Today, it will be a matter of survival for many, forcing mainstream buyers and fast follower organizations to reassess their risk tolerance.

Gartner’s 1H21 Cool Vendor research profiles a total of 123 Cool Vendors across 29 individual reports. This overview highlights representative Cool Vendors — those that represent a category or class of value for buyers. These Cool Vendors offer unprecedented opportunities to exploit new business models to truly transform business, compress cycles of insight and take actions to get to business outcomes. Technologies such as artificial intelligence/machine learning (AI/ML), computer vision (CV), augmented reality (AR), various types of sensors, semiconductors, blockchain, cloud and new data sources, and combinations continue to provide a solid base of coolness.

CIOs should be looking out for the additional trust-building attributes of Cool Vendors. Besides reviewing the innovation that Cool Vendors bring, CIOs should pay attention to attributes of vendor competence and ethics in order to select with greater confidence. Readers should review the referenced reports for more providers to consider.

Gartner’s definition of a cool vendor is a small company offering a technology or service that is innovative, impactful or intriguing.

The three elements of a Cool Vendor are further explained:

- Innovative — Enables users to do things they could not do before
- Impactful — Has or will have a business impact — not just technology for its own sake
- Intriguing — Has caught Gartner’s interest during the past six months.

A more detailed explanation of the Cool Vendor selection criteria is available in Note 1.
Research Highlights

Cool Vendors Are Highlighting Competence Through Improved Delivery of Service and Operational Gains, and Enabling New Ways of Working

Cool Vendors increase digital business competencies by:

- Improving delivery of service
- Optimizing efficiency and gains
- Expanding and facilitating new ways of working

Over the past 2 years, investments in frontline worker technologies yielded a high return on investment (ROI), which the pandemic accelerated further. Collaboration technology became especially helpful during the crisis as people worked remotely. Little-known but impactful cool cloud networking vendors proved they can help both platform and networking teams improve connectivity within and to cloud environments beyond what hyperscalers can deliver.

Given the complexity and criticality, technology providers are adopting new predictive guides that drive both focus and alignment between marketing and sales. This is supported by first- and third-party data analytics and multitouch attribution insights that link value prediction and measurement across buying processes. Organizations exploring human capital management (HCM) technology transformation should investigate the technology trends to prepare for new ways of working.

- Cool Vendor Mentimeter provides an audience engagement platform that offers a set of capabilities aimed at enhancing the virtual experience for presenters and attendees before/during/after online meetings. Mentimeter focuses on interactive presentation elements by adding questions or other interactive elements between slides, enabling audience members to connect. Answers can be displayed or generated into graphics, while other interactive elements can be reused in future sessions.
Cool Vendor Beehivr helps sales professionals prepare for, execute and follow up sales meetings while working remotely. Few sales tools actually help sales representatives with their job’s core aspect — prospect interaction. Beehivr collates all relevant account information in a repository controlled by marketing, so that content is trusted and adheres to corporate compliance or brand standards. After a meeting, the representative can then easily select relevant content and send it to the client on Beehivr’s email template. The prospect accesses content via a secure portal that tracks reading depth for performance metrics.

Cool Vendor Tada Cognitive Solutions’ (Tada’s) patented technology, Digital Duplicate, provides data visibility across the enterprise through a semantic network. The digital fabric offers real-time views of critical metrics across business processes, such as a supply chain digital network covering supplier networks, inbound/outbound freight, manufacturing, warehousing, retailers and customers. Once the digital fabric is established, business leaders can use Tada on desktop or mobile devices to view any developing risks and mitigate them at once. Users also leverage AI or ML-based decision engines coupled with exploratory workspace and self-service data preparation for scenario analysis and simulations.

Cool Vendor BizMerlinHR is one of the first examples Gartner has seen of a new generation of HR platforms expected to replace the cloud HCM suite, the current dominant deployment model. BizMerlinHR offers the organization a choice between liberating itself from a forced one-size-doesn’t-fit-all model, or developing and maintaining integrations between the suite and third-party applications brought in to fill gaps. Central to this shift away from the cloud HCM suite is the extent to which the system is designed to work seamlessly with third-party applications. Examples of third-party applications that BizMerlinHR supports with out-of-the-box connectors include Google Workspace, Microsoft 365, Salesforce, Slack, LinkedIn, DocuSign and Zoom.

Recommendations:

- Address feedback from virtual meetings in new ways by implementing engagement technologies that coax remote workers to actively participate in meetings.
- Improve engagement effectiveness by elevating marketing and skills through utilizing AI-enabled insights and recommendations.
- Acquire key skills for the virtual and logical data models needed for data fabrics through pilots for data virtualization and logical data warehousing.
- Evaluate HR application frameworks to build a resilient HCM architecture that enables faster deployment of HR functions and applications.
Related Research

- **Cool Vendors in Cloud Networking** — Although established vendors don’t always address gaps in native networks’ production enterprise workloads, infrastructure and operations (I&O) networking leaders can find help with these emerging cool cloud networking vendors.

- **Cool Vendors in Human Capital Management: Technology Innovations to Support the Future of Work** — Application leaders should continue applying HR technology innovations to prepare for the future of work and assess vendors that are taking a different approach.

- **Cool Vendors for Digital Workplace Strategy and Applications** — Ongoing remote work and the transition to hybrid working has forced application leaders to find novel solutions for new challenges in the digital workplace.

- **Cool Vendors in Silicon Photonics** — This emerging technology for interconnects and processing helps accelerate performance without compromising other efficiencies and cost benefits for data centers in health, wellness and automotive.

- **Cool Vendors in Cloud Computing** — As a multicloud strategy becomes inevitable for most global enterprises, CIOs should assess these Cool Vendors that are disrupting the cloud market through robust multicloud implementation products.

- **Cool Vendors in Edge Computing, 2021** — As edge computing moves from POCs and custom-made monolithic projects to repeatable enterprise applications, these Cool Vendors each solve the “complexity problem” in a unique way.

- **Supply Chain Cool Vendors, 2021** — Supply chain technology leaders seeking to address increased complexity, competition and evolving business models should explore the vendors highlighted in this research.

- **Cool Vendors in Data Management** — For data and analytics (D&A) leaders, these Cool Vendors enable a data fabric that makes heterogeneous, distributed data appear consolidated, accessible and business-friendly.

- **Cool Vendors in Technology Marketing** — This year’s Cool Vendors help technology and service providers scale demand, improve win rates and accelerate deal velocity using AI-based sales acceleration and customer experience (CX) solutions.

- **Cool Vendors in Storage and Hybrid Infrastructure — Modernize Legacy, Prepare for Tomorrow** — To address the challenge of adopting modernized workloads while managing unstructured data growth and legacy technology, I&O leaders should evaluate these Cool Vendors.
Cool Vendors Are Innovating by Extracting New User Insights and New Immersive Experiences Through Accelerated Development

Cool Vendors can improve buyer trust by demonstrating an agile, innovative approach to solve problems in new and novel ways. The thingification of the Internet of Things (IoT) adds intelligence and connectivity well outside the confines of an enterprise office, and literally beyond the boundaries of Earth.

Cool Vendors blur the physical and digital worlds across immersive experiences, leading to shifts in how the digital and physical worlds interact via the AR cloud. In applying AI to advanced analysis and logic-based techniques, the Cool Vendors in AI core technologies help organizations move projects into production in four key ways:

- Resolving difficulties with deploying into business processes
- Addressing data quality/integrity issues to interpret events
- Supporting and automating decisions
- Taking action

Automation is also an essential component when users require contextualized analytics in real time. For composed analytics applications, a tailored experience requires contextualization. Composability is the ease with which augmented analytics capabilities are able to be integrated with other applications. The cool data and analytics vendors profiled demonstrate how they combine and build synergies among automation, augmentation, contextualization and composability.
Cool Vendor Sisu is an augmented analytics tool for diagnostic analysis that helps D&A leaders and technical professionals accelerate the exploration of complex, cloud-scale data. Its analytics engine tests hundreds of millions of hypotheses in seconds and automatically surfaces key drivers in the data that are generating a significant impact on key performance indicators (KPIs). Sisu is designed for monitoring and fast drill-down into the highest-impact dimensions of data for a comprehensive, contextualized explanation of why the KPIs most relevant to each user are changing. Clients report time to production of six weeks or less.

Cool Vendor Lacuna Space is launching a constellation of low Earth orbit satellites capable of picking up IoT messages from sensors on the ground, using the industry-standard long-range wide-area network (LoRaWAN) protocol and frequencies. The use of widely adopted standards ensures that sensors are low cost and able to switch between terrestrial and orbital networks as they become available. IoT sensor deployment is limited by the network coverage available. Because interoperability between private and public networks is limited, Lacuna Space provides a space component with global coverage for use when sensors are outside existing network coverage. Sensors equipped with LoRaWAN connectivity can be fitted with a modified antenna capable of communicating with space and terrestrial networks.

Cool Vendor Explorium is an external data platform with an innovative approach to data that increases the predictive power of models. Customers can use Explorium as a data enrichment platform or a fully automated machine learning (AutoML) platform for data science. The Explorium platform includes a feature store that allows customers to integrate disparate data sources via a single API. A big part of the company's effort is data hunting (that is, searching for data, keeping the data fresh and creating derived data that can't be found elsewhere). Every week, customers get new data, and they can automatically explore all data sources and control what data is used.

Cool Vendor ReSight is part of a small but growing number of providers that offer services to anchor digital content with a noncentralized peer-to-peer-based registry of physical locations and objects. This registry serves as a database to allow users to navigate across different AR experiences, regardless of device. For example, registries would be used by content creators to tether experiences in predetermined ways to geospatially unique people, objects and places when an AR cloud query is made.
Recommendations

- Pilot innovative capabilities of cloud analytics by assessing the composability of a solution to integrate with emerging capabilities in the cloud, even if the majority of your deployments are still on-premises.

- Shift IoT connectivity from a question of coverage to one of cost by assuming global availability from satellite service providers, such as Lacuna Space.

- Accelerate the time to value from AI initiatives by exploring and leveraging new solutions offered by startup vendors based on your use cases and industry needs.

- Investigate a comprehensive AR cloud solution to deliver persistent, collaborative and scalable experiences (for example, marketing, manufacturing and commerce).
Related Research

- **Cool Vendors in Frontline Worker Technologies, 2021** — I&O leaders looking to capitalize on frontline worker technologies that drive high ROI should review these four innovative vendors.

- **Cool Vendors in IoT Thingification** — As the cost of technology declines, some service providers are pushing thingification to the ends of the Earth.

- **Cool Vendors in Enterprise AI Operationalization and Engineering** — With more than half of successful AI pilots never making it to the deployment stage, D&A leaders must evaluate these emerging Cool Vendors to build enterprise-grade AI platforms and solutions.

- **Cool Vendors in Advertising** — These Cool Vendors help digital marketing leaders responsible for advertising navigate pandemic recovery, rapid shifts in media and purchase patterns, and new limitations on data-driven targeting and measurement.

- **Cool Vendors in AI for Computer Vision** — D&A leaders should evaluate the Cool Vendors in this report to enhance their CV capabilities for industrial applications, image upscaling, automated model training and agriculture.

- **Cool Vendors in Analytics and Data Science** — D&A leaders should assess these Cool Vendors to achieve more productive self-service analytics and data science via automation, augmentation, contextualization and composability.

- **Cool Vendors in AI Core Technologies** — D&A leaders can leverage this year's Cool Vendors to address priorities around managing, governing and scaling AI initiatives across different industries.

- **Cool Vendors in CRM Customer Service and Support** — As we enter the postpandemic and as hybrid work expands, these Cool Vendors offer innovative ways to support better customer service and operational outcomes.

- **Cool Vendors in Conversational and Natural Language Technologies** — For application and software engineering leaders, these Cool Vendors offer AI methods and pipeline facilitation to address the enterprise's maturing requirements for language automation at scale.

- **Cool Vendors in Immersive Experiences** — Enterprise architecture and technology innovation leaders should vet these Cool Vendors to enhance how their organizations engage with people everywhere in the physical or digital world.
Cool Vendors Are Making the Use of New Technologies More Ethical, Secure and Safe to Reduce Personal, Business and Societal Vulnerabilities

Customers with ethics and security concerns are increasingly placing responsible AI in the spotlight because of increased organizational and societal exposure to AI bias, distrust and concerns about fairness that inhibit AI adoption. As AI becomes ubiquitous, AI practitioners will see more instances that data and algorithms amplify and perpetuate human biases. Complexity and scale in modern infrastructure as a service (IaaS) and platform as a service (PaaS) workloads continue to grow exponentially. Multicloud, containerized and serverless applications combine to form dynamic, unpredictable interactions that are increasingly difficult to secure without advanced cloud security techniques. All these elements are critical to building trust, complying with privacy regulations and protecting the customer's brand. Cool Vendors that support transparent and ethical processes stand the best chance of securing the trust of customers.

- Cool Vendor Synthesized uses AI and generative adversarial networks (GANs) to generate synthetic data and systematically identify and mitigate bias in the resulting dataset. Synthesized addresses issues concerning both AI-related privacy and bias, while retaining the same statistical power in the model's original dataset. The software identifies key variables that can contribute to bias and impact decisions, such as gender, age and income. It profiles all possible groups, including those protected under discrimination laws, in the original dataset. Synthesized's software then compares the distribution of predictive scores (for example, credit scores) across groups to remove potential for statistical bias.

- Cool Vendor Apiiro automatically identifies material changes to code that requires security attention. It eliminates the majority of changes that present no security risk and require no security testing. Apiiro does this by using historical and continuous analysis of code and development metadata (for example, commit messages, pull request discussions, user stories and other factors, such as the seniority of developers).
Cool Vendor Wiz uses multiple API and log data sources to tackle sprawling multicloud asset inventories. Wiz also applies these sources to provide security insights by analyzing traditional cloud security posture management (CSPM) configuration and workload data, which identifies potential attack vectors throughout public cloud or on-premises deployments. In addition, Wiz uses graph technologies to create multiple contextual relationships within cloud workloads, including network exposure, vulnerabilities, secrets, and user and machine identities and their derivatives. This enables predictive security assessments of proposed changes to infrastructure as a service (IaaS) and platform as a service (PaaS) deployments.

Recommendations:

- Promote responsible development of AI. It should be spearheaded by an AI governance committee that provides standards, guidelines and interventions for responsible AI testing and implementations.

- Assess and monitor application components and configurations to automatically identify potentially risky changes to applications and address any drift in threat modeling.

- Invest in innovative CSPM tools to address gaps in strategic tooling in two ways: evaluate current capabilities against known use cases, and assess your ability to protect serverless and container-based workloads from evolving threats.
Related Research

- **Cool Vendors in Insurance** — Life and property and casualty (P&C) insurance CIOs can leverage innovations from the vendors in this research to gain deeper customer insights and accelerate their digital business technology platform ambitions.

- **Cool Vendors in DevSecOps** — This report profiles four Cool Vendors whose innovative technologies introduce security to new DevOps development styles by optimizing speed, efficiency and automation.

- **Cool Vendors in AI Governance and Responsible AI** — These Cool Vendors offer D&A leaders the tools to assure AI fairness, bias mitigation, explainability, privacy and compliance.

- **Cool Vendors in Cloud Security Posture Management** — Security and risk management leaders should assess this report for innovative techniques to secure dynamic, on-premises, containerized and serverless workloads.

- **Cool Vendors in Security Operations** — These Cool Vendors focus on innovative ways to support security operations through the use of automation and counterintuitive approaches.

- **Cool Vendors in Identity-First Security** — The identity and access management (IAM) vendors presented in this research demonstrate critical, identity-first approaches that support rapid assessment of trust, enhanced modes of authentication and cloud access.

- **Cool Vendors in Monitoring, Observability and Cloud Operations** — I&O leaders looking to accelerate business velocity should evaluate how innovative vendor approaches can deliver insight into their development pipeline and production environments.

Related Resources

Client Question Video: Three Approaches to Support Data and Analytics Governance

Toolkit: How to Rank and Prioritize Your Use Cases With a Gartner Prism
Evidence

Gartner’s 2021 Technology End-User Buying Behavior Survey was conducted to understand how organizations approach large-scale buying efforts for enterprise technology.

The research was conducted online from October through December 2020 among 1,500 respondents in organizations with at least $1 million in revenue and 20 employees in the following regions:

- The U.S. (33%)
- France, Germany and the U.K. (15% each)
- Australia and India (8% each)
- Canada (5%)

Industries surveyed include manufacturing and natural resources; banking and securities; retail; government; insurance; healthcare; communications, media and services; education; utilities; and transportation. Of note, technology vendors across industry categories were excluded from this sample.

Respondents were required to be manager level or higher, in a role that involves the evaluation or selection of products or services for technology projects. They also needed to be aware of large-scale buying efforts for technology (including net new purchases, renewals and replacements) occurring in the past two years.

For the purposes of this study, “large scale” purchases are defined as followed:

- Organizations with fewer than 250 employees: more than $15,000
- Organizations with 250 to 999 employees: more than $25,000
- Organizations with more than 1,000 employees: more than $50,000

The study was developed collaboratively by Gartner analysts and the Research Data and Analytics team.

Disclaimer: Results of this study do not represent global findings or the market as a whole but reflect sentiment of the respondents and companies surveyed.

1 2020 Edelman Trust Barometer, Edelman.
Note 1: Understand the Cool Vendor Selection Criteria

- The vendor should be less than 10 years old.
- The vendor must not be featured in a Vendor Rating or in a Magic Quadrant.
- The vendor must not be previously featured in a Cool Vendors report.
- The vendor must be an independent business, a discrete subsidiary (that is, tracks or reports revenue separately) or spinoff of another vendor. In this way, subsidiaries of major vendors may be considered unless they are majority-owned entities.
- The vendor’s annual revenue must be less than $100 million.
- The Cool Vendor product needs to be available at point of submission for inclusion in a Cool Vendors report.
- The vendor must be considered innovative or transformative for IT products, services or initiatives. A Cool Vendor is not just about technology; it may also include services.
- Previously profiled Cool Vendors can be profiled again only in the retrospective “Where Are They Now?” section of a Cool Vendors report.

Recommended by the Authors

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