> Strategic planning is crucial, but most organizations limit their vision to five years or less. Enterprise architecture and technology innovation leaders should look further ahead by assessing the less obvious developments envisaged by Gartner's provocative Maverick* predictions.

Additional Perspectives

- Summary Translation: Maverick* Predicts 2022: The Future According to Gartner's Unconventional Thinking
  (11 January 2022)

Overview

Key Findings

- The accelerating capabilities of digital technologies may enable one or more "metaverses," but at high social cost.

- Advancing IT and artificial intelligence (AI) capabilities will not remove humans from decision-making processes.

- Changes in transportation technologies will place new burdens on society and may undermine the very reason for transitioning away from fossil fuels.

- Having richer and richer data about people may not lead to better businesses or happier customers.

Recommendations

Enterprise architecture and technology innovation leaders, including CTOs, should:

- Prepare their organizations to meet future challenges by creating strategic roadmaps that extend beyond five years.

- Resist the temptation to simply extrapolate from the present, and instead assess less obvious and more innovative possibilities and courses of action.

Maverick* Strategic Planning Assumptions

By 2040, widespread participation in "metaverses" will triple healthcare costs and significantly decrease societal productivity, due to increases in personal and social disorders.

Through forever, new technologies, such as AI, will first be used to automate every type of decision making, before people revert to making daily decisions themselves

By 2030, shortages of natural resources will prevent sales of electric vehicles from exceeding 10% of the world's new vehicle sales.

By 2036, after many clashes between governments and a dysfunctional cloud computing market, 80% of this market will be regulated as critical public infrastructure.

By 2030, half the world's B2C businesses will stop retaining customer data, due to unmanageable compliance costs, and attempt to regain customers' trust.

By 2027, a quarter of the Fortune 20 companies will be supplanted by companies that "neuromine" and influence subconscious behavior at scale.

Analysis

This document was revised on 30 March 2022. The document you are viewing is the corrected version. For more information, see the Corrections page on gartner.com.
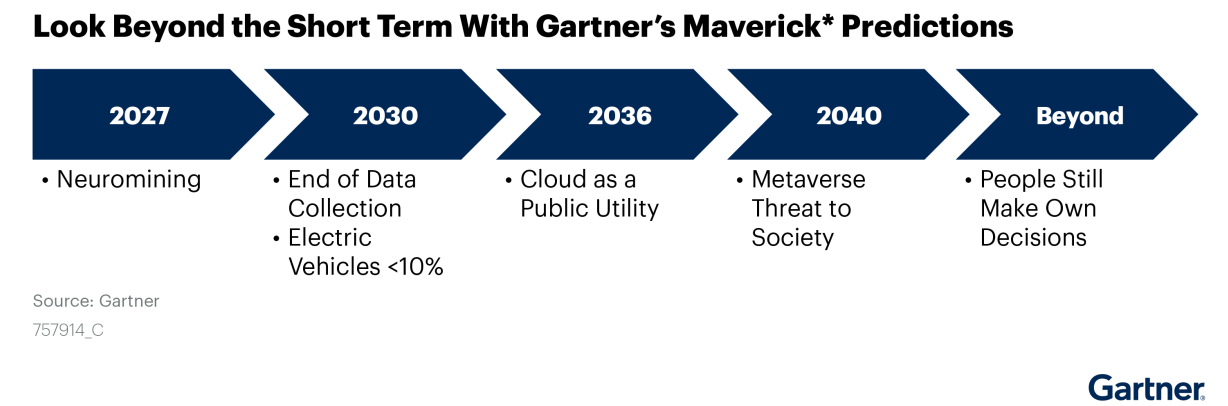
What You Need to Know

This is "Maverick" research, designed to spark new, unconventional insights. Maverick research is unconstrained by Gartner's typically broad process of consensus formation in order to deliver groundbreaking ideas. The predictions in this document are deliberately provocative. On the term "maverick" see Note 1.

The impact of technologies such as AI, cloud computing and virtual reality (VR) is so profound that enterprise architecture and technology innovation leaders must start planning now for changes that are a decade or more away. This represents a huge change for these strategic planners, who usually look only two years ahead and almost never more than five.

Our everyday lives, already reliant on digital technologies, will become even more so. It is a near certainty that one or more "metaverses" will become a social and economic force, although this may not lead to better experiences for consumers. Meanwhile, technologies in other areas, such as those powering the move to electric vehicles, may run into resource challenges as we trade one dependency for another.

Gartner's Maverick* predictions prompt enterprise architecture and technology innovation leaders, including CTOs, to prepare for a future that differs from the present in unexpected ways. Formed in our research incubator, they are designed to explore alternative opportunities and risks that could influence your strategy, even if they are many years away. This set of predictions extends as far as 2040 and beyond (see Figure 1) — well beyond the range of Gartner's standard Strategic Planning Assumptions.

Figure 1: Look Beyond the Short Term With Gartner's Maverick* Predictions

Look Beyond the Short Term With Gartner's Maverick* Predictions

2027	2030	2036	2040	Beyond
• Neuromining	• End of Data Collection • Electric Vehicles <10%	• Cloud as a Public Utility	• Metaverse Threat to Society	• People Still Make Own Decisions

Source: Gartner
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Gartner

Maverick* Strategic Planning Assumptions

Strategic Planning Assumption: By 2040, widespread participation in "metaverses" will triple healthcare costs and significantly decrease societal productivity, due to increases in personal and social disorders.

Analysis by: Frank Buytendijk, Bart Willemsen

Key Findings: Virtual reality (VR) has been promised — and underdelivered — for years. In its latest proposed incarnation, VR is referred to by companies such as Meta (formerly Facebook) as the technological foundation of a "metaverse." A metaverse promises to be a virtual, shared open space created by the convergence of virtually enhanced physical and digital realities. It will be physically persistent and provide enhanced experiences.

People will want to participate in one or more metaverses because:

- Through the use of avatars — designed digital identities — they will be able to free themselves from their physical identities. People with disabilities, for example, will be able to participate in virtual-identity-based experiences unimpaired by the physical limitations that their disabilities impose outside a metaverse. Also, since it will be possible to switch or adjust identities, a person's presence in a metaverse may be context-dependent, based on specific circumstances, spaces, moods, environments and other factors.

- In a metaverse, people will not be limited by the physical boundaries of where they live. Different metaverses will have different rules and mores, and people will be able to participate based on their interests. This participation could serve as an extension of people's real-world lives, as well as an escape from constrained physical environments.

- In a metaverse, people will be able to participate in activities that they otherwise could not because, for instance, those activities would be too expensive or too dangerous in the real world. Possible examples are spaceflight, mountain climbing and deep-sea diving.

- Metaverses will serve as practice environments in which participants will be able to fail until they master something, or play out multiple scenarios. They may, for example, help people learn how to convey bad news, succeed at job interviews or take charge of high-stakes situations.

However, the problems of metaverses will outweigh the benefits:

- Use of metaverses will increase social ineptitude. In the real world, it is not possible to train for every situation, so we need to deal with them as they appear. In a metaverse, it will be easier to avoid awkward situations by shifting identity, so many people will not learn how to deal with difficulty, awkwardness, adversity, diversity of opinion or other challenges.

- Significant amounts of time spent in metaverses will cause major physiological problems, such as muscle atrophy, weakened immune systems because of insufficient real-world exposure to pathogens, and illnesses arising from poor hygiene.

- If people can choose their own identity, personal identity may regress to the mean, with the result that there would be less diversity within metaverses than in the real world. People with disabilities, for example, may choose to shed their disabilities in metaverses, at a time when — as is already happening in the real world — some could use their "disabilities" to their advantage.

- Metaverses run by commercial companies will have unprecedented levels of digital surveillance. This will be advertised as a high level of security, but will lead to companies having deep knowledge and understanding of participants' every interaction, and informing commercial responses with that understanding.

- Cybercrime and cyberattacks are already harming society in the real world, as shown by their effects on, for example, transportation companies, hospitals, universities and municipalities. But digital attacks on the foundations of a metaverse could hijack, control or bring down the entire metaverse and all who participate in it.

- Social media already results in "bubbles" in which people are exposed only to one-sided information. Metaverses will amplify this effect by providing complete one-sided immersive experiences.

Near-Term Flags:

- Augmented reality, as a related trend and potential stepping stone to full VR experiences, rapidly increases in popularity.

- The VR gaming industry grows massively, with a huge increase in sales of VR headsets (of the magnitude of 500 million units, up from 16 million today).

- Social media platforms use VR more determinedly by applying this technology at scale to draw people further in and keep them engaged.

- Sentiment about the use of digital technologies changes. Current discussions of digital ethics focus on AI and often fail to account for VR.

Market Implications:

- Most likely, there will not be just one metaverse. There will be multiple metaverses, which will compete with each other. Businesses will have to choose which to participate in.

- Businesses tend to look for the most seamless way to interact with customers, and may therefore find metaverses attractive. But use of metaverses may lead to more social and physical dysfunction.

- Social and physical dysfunction is bad for business. Unhealthy customers may not be the most enthusiastic buyers. They certainly will not be the best employees.

- It will be difficult to build the technology required for metaverses, so metaverses may never offer the fully immersive experiences currently envisioned. Moreover, judging from real-world experience with, for example, the ethical consequences of facial recognition technology, metaverse technologies may be heavily regulated or even banned.

Recommendations:

- Prepare for "parallel presences" as metaverses start to emerge. You may need to provide services and products (such as insurance offerings) for virtual worlds or create whole new experiences. Also prepare to have to deal with proprietary payment systems.

- Learn from the challenges faced by today's business ecosystems and use that knowledge to inform your decisions about a metaverse participation strategy. Should your business build and dominate its own multiverse? Or should it try to stand out by offering unique functionality to other companies' metaverses?

- Continuously assess reputational risk and your organization's potential impact on identities in its chosen multiverse ecosystem. Issues with a platform provider may spill over to participants. Regulatory compliance problems may arise if some multiverses are forbidden in certain jurisdictions. Multiverses may themselves impose regulatory frameworks.

- If you work in the government sector, prepare for metaverses in terms of regulation, taxation and participation, as virtual economies will appear.

Related Research:

Augmented Reality and Virtual Reality Will Transform Selling

Emerging Technologies: Head-Mounted Displays for Augmented, Mixed and Virtual Reality

Cool Vendors in Immersive Experiences

The Time Is Now to Use AR and VR to Boost the Online Shopping Experience

Strategic Planning Assumption: Through forever, new technologies, such as AI, will first be used to automate every type of decision making, before people revert to making daily decisions themselves.

Analysis by: Gareth Herschel

Key Findings: Advances in data and analytic capabilities will make it increasingly possible for automated systems to take over many of the decisions that people currently make. Whether automated systems should replace human or personal decision making is the standard question posed by most dystopian science fiction. (It is noticeable that more utopian future scenarios, such as those of the Star Trek television series and films, have unsophisticated AI, relative to other technologies such as teleportation and faster-than-light travel).

We predict that because humans are naturally inclined to want to have control over their decisions, the advance of AI will be limited. We envisage pendulum-like swings, with advances in automated decision making being subsequently counteracted because:

- People make decisions based on a combination of instinct, emotion, principle, collaboration and rationality.

- Although the role of data and analysis will expand, any desire to eliminate people from the decision-making process is likely to be limited.

Machines will help by providing advice and contextual relevance. But, in the end, people will still make the decisions because they will still:

- Want other people to make certain decisions, such as whether an individual is guilty of a crime.

- Want to make certain decisions themselves as a matter of personal choice, such as everyday decisions about which clothes to wear or what to eat for dinner.

- Like to feel the effects of their choices. The decision to drive an exotic sports car, for example, results in a visceral experience that is not duplicated if the car drives itself.

Near-Term Flags:

- Dissatisfaction with automated decisions becomes evident after large mistakes, such as accidents caused by self-driving cars, and small mistakes, such as the ordering of unwanted goods.

- Platforms that use algorithms to influence customers' decisions attract the ire of consumers tired of feeling a loss of control.

- Social media sites stop using algorithms to decide news feed content after an outcry about how the practice warps political freedom.

Market Implications:

- Just because we could use AI or other forms of data and analysis to make certain decisions, it should not be assumed that citizens, customers or employees will want that to happen.

- Companies and governments that insist on leaving all decisions to AI will risk alienating customers and citizens.

Recommendations:

- Safeguard the emotional well-being of employees and customers by ensuring that people are part of the decision-making process.

- Ensure that new technology is not solely driven by AI.

Related Research:

7 Levels of Hybrid Human and AI Decision Making

Decision Intelligence Is the Near Future of Decision Making

Strategic Planning Assumption: By 2030, shortages of natural resources will prevent sales of electric vehicles from exceeding 10% of the world's new vehicle sales.

Analysis by: Mike Ramsey

Key Findings: The rush to replace gasoline- and diesel-powered cars with electric vehicles is gaining momentum. The driving force behind this change is the need to eliminate harmful emissions in order to mitigate climate change. But replacing conventionally powered vehicles with electric ones will not be as simple as transforming old factories or building new ones, for two reasons:

- Electric vehicles represent a compromise, compared with vehicles powered by internal combustion engines (ICEs). Although electric vehicles reduce harmful emissions, they suffer from range limitations, require more charging infrastructure than is currently available, have long recharging times and command high prices.

- Global efforts to increase sales of electric vehicles will place huge demands on natural resources, including nickel, lithium and cobalt, that are already in short supply. This will undermine the environmental sustainability of electric vehicles and may create new geopolitical supply chain concerns.

Near-Term Flags:

- Electric vehicles remain more expensive than traditional vehicles, still have shorter operating ranges, typically continue to take hours to recharge, and are available in only a few different sizes and styles.

- Mineral prices surge as a result of increased demand for batteries. The International Energy Agency predicts a huge shortage of lithium and cobalt through 2030, due to limited mining capacity. [1]

- Commodity costs continue to make up more than 40% of the cost of a battery cell. This is probable because, with demand rising, it is unlikely that battery prices will decline without a fundamental change in their chemistry. BYD, one of the largest battery makers, has already raised its prices.

- Many of the key raw materials used in electric vehicles continue to be mined in only a few specific locations. China controls much of the world's mining of rare-earth metals, the substances used in many electric motors. Lithium, one of the primary ingredients in electric-vehicle batteries, is mined largely in Bolivia. Although more sources of lithium are being developed, reliance on Bolivia's mines is likely to remain. Another key element, cobalt, is rarely mined by itself, but instead gathered when mining for copper. New cobalt mines may therefore be needed.

- As sales accelerate, poor availability of batteries and high costs slow growth and substantiate the views of critics of electric vehicles. These critics worry that electric vehicles simply shift energy security issues from oil to the base commodities that go into batteries and to large-scale battery manufacturing facilities, which are largely located in China.

Market Implications:

- The electrification of vehicles may take much longer than expected because the scale of the shift to the new type of powertrain will create enormous new demand for natural resources.

- Although electric-vehicle prices have been declining, the rate of their gradual reduction toward parity with vehicles powered by ICEs may slow.

- Huge investments in electric vehicles may be fundamentally wasted as it becomes clear that these vehicles are not much of an improvement on those they displaced.

- Massive excavation of minerals and investment in physical plants to make batteries will occur before these issues become clear.

Recommendations:

- Create a contingency plan that envisions both massive investment in electric vehicles, mineral excavation and product development and the subsequent failure of those efforts. This will involve determining ways of keeping existing ICE vehicles on the road longer.

- Investigate the viability of alternative power sources, such as hydrogen fuel cells and synthetic liquid fuels, to meet more exacting environmental standards.

- Prepare for a future in which "green" transportation may require mass transit systems, home-based working and reliance on one or more metaverses, rather than car-based ground transportation.

Recommended Reading

How 'Total Experience' Can Be Applied to Improve the Connected Car

How to Become the Digital Automaker of the Future

Emerging Technologies and Trends Impact Radar: Electrified Vehicles

Hype Cycle for Connected, Electric and Autonomous Vehicles, 2021

Guide to New Business Models in the Electric Vehicle Ecosystem

Strategic Planning Assumption: By 2036, after many clashes between governments and a dysfunctional cloud computing market, 80% of this market will be regulated as critical public infrastructure.

Analysis by: Ephraim Baron

Key Findings: IT outsourcing is a decades-old trend addressing the fact that, for most organizations, the generation and operation of IT is not a core competency. Few organizations really want to be in the business of generating and supporting IT capacity and infrastructure. Most prefer to consume IT as utility services from large, capable providers. The rapid growth in cloud computing demonstrates the desirability of the industrialization of IT.

Given its increasing prevalence and interdependence with business and society, IT has become critical infrastructure. "Big tech," however, is already firmly in the crosshairs of regulators as power becomes increasingly concentrated among a handful of providers. The situation is reaching an inflection point, beyond which providers will be too big to fail but too important to trust on a private, global, for-profit basis.

Differences in regulations between jurisdictions — such as the EU's General Data Protection Regulation (GDPR) measures to safeguard personal privacy, in contrast to the USA Patriot Act's requirements for access — will spur a move to "sovereign" clouds overseen at a national or geopolitical level. They will also lead to regulation and operational oversight by public utility commissions within each jurisdiction.

In this regard, moves are already underway in multiple locations. Examples include:

- GovCloud in the U.S. (to a limited extent).

- Gaia-X in Europe, which continues to evolve.

- De facto, state-approved providers in China, such as Alibaba and Tencent.

- Market gateway providers in specific markets.

Near-Term Flags:

- Concentration risk among existing hyperscalers limits further consolidation within the cloud provider market.

- Calls for regulation of cloud computing and the breakup of the hyperscalers from their parents grow louder every day. In the U.S., animus toward big tech is one of the few points of agreement between the two major political parties.

- Customer demand for end-to-end security management aligns with specific jurisdictional requirements, in contrast to the current shared security model offered by the hyperscalers.

Market Implications:

- The pace of cloud service innovation will slow as focus shifts to replicating existing technologies in each jurisdiction and applying regulatory overlays.

- The need for interoperability between sovereign clouds will require uniformity of data exchange. This will result in further commoditization and regulation as services and interfaces become standardized and universal.

- Proliferation of sovereign clouds will lead to increased duplication of infrastructure and data. This will result in increased power consumption and IT contributing more to global warming.

- Outages among hyperscale providers are common and can affect billions of people around the world. If oversight shifts to sovereign entities, outages will impact national reputations and lead to divisions between haves and have-nots.

Recommendations:

- If you work for a hardware vendor, continue to position and promote your products as alternatives to regulated clouds.

- If you work for a service provider, differentiate your company not just by industry but also by how efficiently and effectively it can architect and operate sovereign services and applications.

- If you work for a global system integrator, start planning, creating and operating regional subsidiaries and practices for each sovereign jurisdiction.

Related Research:

Emerging Technologies: Risk, Regulation and Responsibility — How Hyperscalers Must Increase Public Trust

Emerging Technologies: Compliance Regimes Will Break Public Cloud Scale and Innovation

Strategic Planning Assumption: By 2030, half the world's B2C businesses will stop retaining customer data, due to unmanageable compliance costs, and attempt to regain customers' trust.

Analysis by: Bart Willemsen

Key Findings: Given the principle that the more you know more about your customers, the better satisfaction, loyalty and advocacy are, a trusted 360-degree view of the customer is at the core of many customer-centric strategies. It is often seen as a prerequisite for technology initiatives to improve the customer experience and business outcomes. Current thinking promotes the modernization of how organizations use customer data, through data minimization and consent management, for example. This Maverick* prediction, however, envisions an unconventional future in which organizations do not need to retain customer data, provide superior customer experiences and support real-time customer journeys.

Customer data retention practices rarely center on the customer experience, but are more encompassing. Too often, the "single view" rests on siloed data and fractured business processes, and extensive (often unnecessary) storage of customer data. And it is often paired with a need for outdated information governance programs and compliance costs that exceed what organizations can afford. The case for a trusted 360-degree view promises only a decreasing, marginal return, due to factors such as:

- Digital business ecosystems diffusing responsibility for customer data and increasing the level of risk, threat and vulnerability to fines and cyberattacks, while due diligence processes fail to adapt in time.

- The rise of privacy and security regulations and fines. In the third quarter of 2021, GDPR fines exceeded $1.1 billion, which was triple the total for 2020 as a whole. [2]

- Increasing expectations about how information (including customer data) is managed and used as a driver of customer trust. Responsible guardians of information quality — who work to ensure that only true, verified information is shared and circulated — are critical drivers of trust. [3]

- Traditional approaches, such as pseudonymization, no longer being enough to protect customer data. For example, 99.98% of U.S. citizens can be easily identified from any database with 15 or more demographic attributes. [4]

- The emergence of alternatives for customer records, such as customer-controlled records, digital customer twins and third-party offerings that enable organizations to "consult" data, rather than copy, ingest and retain it (as, for example, with the Solid project and Australia's My Health Record).

Eventually, the costs and risks of adequately managing customer data will exceed the benefits. The costs include those of compliance and of noncompliance, such as sanctions and breach remediation. Privacy and data security expectations alone are forcing organizations to incur substantial costs to keep people, processes and technologies up to date with a view to mitigating these risks and maintaining consumers' trust.

Near-Term Flags:

- An increase in class actions and mass claims concerning privacy and data protection — and in legislation supporting them, such as the Netherlands' WAMCA act. Also a rise in monetary compensation for data incidents, such as security breaches, and "veil-piercing" cases, such as when a parent company is deemed liable for its subsidiaries or a CEO for noncompliant business.

- Increased failure to collect first-party data in the rush to replace third-party data (as with cookie deprecation, for example), paired with emerging alternatives to first-party data, such as synthetic datasets (see Maverick* Research: Forget About Your Real Data — Synthetic Data Is the Future of AI).

- A decline in customer retention, due to privacy concerns.

- Increased adoption of technology that offers stronger privacy protections, such as private web browsers like Firefox Focus, DuckDuckGo and Brave. Also, incentives such as Brave's Basic Attention Token (BAT) or early adoption of centralized methods of verifying information and consent, such as Unified ID 2.0.

- Lawmakers and advocacy groups calling for customer-controlled records and/or alternatives, such as the extension of decentralized identity services to replace first-party data in organizations.

Market Implications:

- A shift in customer data control would most likely impact fraud prevention and management. Although new, large-scale solutions will be needed for customer-controlled records, third-party offerings may provide a more holistic approach to fraud management.

- A new set of industry compliance experts would be needed to enable organizations to act without collecting customer data. For example, those skilled in empathetic banking practices could explore how to qualify individuals on the basis of social listening, public records and zero-knowledge proof (ZKP) credit checks within know-your-customer compliance policies.

- Increased innovation would be needed in relation to technologies such as AI and predictive analytics' abilities to supersede behavioral observations and understand customer intent from current or historical records.

- Several customer data collection methods would be rendered obsolete for organizations, depending on user-level identifiers, as digital data providers limit their ability to track users via, for example, devices, browsers and platforms.

- Several customer-data-processing jobs would be displaced or rendered obsolete. But new jobs would also be created to manage self-service and automated components, as well as to enable customer experience projects to use other types of data.

- There would probably be an acceleration of industry initiatives, such as those concerning decentralized identities, from technology giants like IBM and Microsoft, startups like SecureKey, Evernym and Trusted Key (owned by Workday) and nonprofit organizations like Sovrin Foundation.

Recommendations:

- Perform a customer data risk audit by assessing the direct and downstream impacts of changes to customer data. Quantify privacy and security risks to promote data minimization (see Use a Privacy Impact Assessment to Ensure Baseline Privacy Criteria).

- Transition to modern data and analytics governance models (see Data and Analytics Leaders Must Use Adaptive Governance to Succeed in Digital Business) and from truth-based to trust-based information governance models using trusted external data sources (see Reset Your Information Governance Approach by Moving From Truth to Trust).

- Move to a composable view of the customer by establishing design principles for new customer-centric initiatives and embracing alternative records management systems, such as decentralized identity services (see Leading Customer Experience in a Composable World).

Recommended Reading:

Move to Contextual Privacy in Digital Society

Top Strategic Technology Trends for 2022: Privacy-Enhancing Computation

3 Scenarios for Privacy's Impact on Targeted Advertising

Maverick* Research: Pursuing a 360-Degree View of the Customer Will Destroy Your Business Maverick* Research: The Disappearing Customer

Strategic Planning Assumption: By 2027, a quarter of the Fortune 20 companies will be supplanted by companies that "neuromine" and influence subconscious behavior at scale.

Analysis by: Jackie Fenn

Key Findings: Most executives already appreciate that every company is a technology company. The winners of the next decade will also be experts at neuromining — that is, applying behavioral intelligence and related technology to analyze, understand and influence human behavior at scale.

Tapping into human goals, desires and motivations at high speed and on a large scale will enable companies to dominate customer relationships and amplify employee engagement and productivity. This will lead to further disruptions in industry leadership, similar to those created by today's digital giants. Today's leaders will be joined by other technology companies and pioneers from other industries who crack the combination of technology mastery, deep behavioral expertise, data centricity and a culture of experimentation.

While the initial focus will be on customer-facing neuromining, successful organizations will apply the same techniques internally to identify targets and positive interventions for all aspects of people's work activities, including employee engagement, decision making, management and leadership, collaboration, and productivity.

The growth in neuromining and other behavioral competencies will be accompanied by a corresponding emphasis on the ethics of influence. Neuromining does not have to be one-sided or surreptitious, but can incorporate consumer-friendly approaches to influence, such as transparent "nudges" that make people more aware of their subconscious tendences.

Winning organizations will leverage the continued growth and widespread availability of behavioral data, such as:

- Social media analytics (see the Internet of Behaviors section in Top Strategic Technology Trends for 2021)

- The increasing sophistication of analytics and AI applied to behavioral data

Advances in neuroscience and technologies to identify and direct activity inside the brain will add further precision in influencing attitudes, actions and behavior, and launch further waves of neuromining capabilities.

Near-Term Flags:

- The ongoing and growing dominance of companies making extensive and successful use of behavioral analysis, social influence and insights from neuroscience.

- A prevalence of behavioral insights or "nudge" competency centers in large companies and government organizations.

- The emergence of a viable and high-growth industry (that is, doubling every year for five years) for specialist companies (for example, BEworks, Irrational Labs and BVA Nudge Unit) providing behavioral insight services, as well as larger service providers.

- Emergence or extension of privacy regulations addressing how, and how much, companies and algorithms can mine and influence people's behavior and mental state.

Market Implications: Market leadership has been reshaped in the past 10 years to favor companies that are adept with technology and analytics. We expect this trend to continue, with market dominance attained by companies that add or intensify their neuromining focus and competencies.

The current market of specialist providers offering behavioral insight technologies and consulting services will grow into a multibillion dollar industry impacting all aspects of organizations and a wide range of business challenges and opportunities. Beyond marketing and customer experience, neuromining will expand into scalable leadership and performance coaching, every aspect of decision making, and employee and citizen well-being.

Many companies will seek a genuine and transparent "win-win" for customers and employees to act in their own best interests. However, others will successfully tap into the "darker side" of human motivation, resulting in ongoing mistrust of neuromining and influence technologies among portions of the population, and triggering additional privacy regulations in some geographies.

Recommendations:

- Create a behavioral insights team or engage a third-party specialist service provider to focus deliberate and ongoing attention on questioning assumptions and challenging current approaches.

- Develop in-house expertise on understanding and mining behavioral data to improve customer and employee outcomes.

- Depending on the focus of behavioral change or influence, position the expertise in marketing, HR, R&D, product development, or as part of central services (for example, aligned with data scientists).

- Include in any neuromining initiative an assessment of potential ethical, privacy and legal issues.

Related Research:

How to Use Behavioral Economics to Drive Adoption and Save Money in Your Organization

Create Self-Sustaining Culture Hacks by Applying Nudging Techniques

Competitive Landscape: Customer Analytics

Market Guide for Web, Product and Digital Experience Analytics

A Look Back

In response to your requests, we are taking a look back at some key predictions from previous years. We have intentionally selected predictions from opposite ends of the scale — one where we were wholly or largely on target, as well as one we missed.

Not applicable as this is the first time we have published Maverick* Predicts.

Evidence

[1] Alex Scott, IEA Warns of Battery Materials Shortages, Chemical and Engineering News (C&EN), 15 May 2021

[2] Justinas Baltrusaitis, GDPR Fines in Q3 Almost Hit €1 billion, 20x More Than in Q1 and Q2 Combined, Finbold, 7 October 2021

[3] 2021 Edelman Trust Barometer

[4] Luc Rocher, Julien M. Hendrickx and Yves-Alexandre de Montjoye, Estimating the Success of Re-Identifications in Incomplete Datasets Using Generative Models, Nature Communications, 2019

Note 1: Roots of the Word "Maverick"

Derived from the name of Texas rancher Samuel Maverick and his steadfast refusal to brand his cattle, "maverick" connotes someone who willfully takes an independent — and frequently disruptive or unorthodox — stand against prevailing modes of thought and action.

Recommended by the Authors

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Maverick* Research: Push Yourself to Think Beyond Conventional Wisdom

Maverick* Research: Expanding on Edgy Ideas

TechWave: A Gartner Podcast for IT Leaders | A Framework to Strategize Data Privacy

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