Maverick Research: Rise of the Digital Humans

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This themed wave of Maverick research identifies scenarios for, and the implications of, growing use of increasingly capable "digital humans" — digital representations of people. This growth is fueled by two technological innovations: generative AI and metaverse experiences. By Gartner Futures Lab.

Overview

Opportunities and Challenges

- Digital humans are designed to bring human-like machine interactions to the forefront of new business and operating model innovations.

- Digital humans' capabilities are becoming so advanced that they could augment some human roles and displace or eliminate others.

- New models for communicating and supporting customers, employees, prospects, students and suppliers are being enabled by the combination of digital humans and other emerging technologies.

What You Need to Know

- Digital humans are representations of people, typically rendered as digital twins, digital avatars, humanoid robots, generative AI (GenAI) or conversational user interfaces.

- Technological advances and cultural acceptance will pave the way for digital human employees.

- Within decades, digital humans will be dominant creators of visual and performance art, competing with each other for primacy in the art world and reflecting our era for future generations.

- The prospect of digital townships — online communities with collective security and governance interests — offers a glimpse of cyberspace utopia.

Strategic Planning Assumptions

By 2025, government scrutiny, geopolitics and populist backlashes against technology companies will slow the growth in new users of traditional social media platforms and give the impression that the social media phenomenon has peaked.

By 2026, 50% of B2B buyers will interact with a digital human in a buying cycle.

By 2035, most documentary and journalistic media (representations of news and historical events) will be created by digital humans.

By 2030, more than 5 million line and middle managers in midsize and large enterprises will be replaced by digital human managers, a development that will raise employee productivity and engagement.

Insight From the Experts

Dear Maverick reader,

Few technology disruptions cause massive industry shifts that widen the gap between efficient and inefficient organizations and lead to new startups that disrupt industries. When such transformative disruptions do occur, they rarely result from a single new technology, but rather from a combination of technologies that may seem to create infinite opportunities, along with risks perceived to be existential.

This wave of Maverick research contends that the combination of generative AI (GenAI) and metaverse experiences to form digital humans — digital representations of people — will cause huge disruption. Digital humans interact, learn and express themselves in humanlike ways. For organizations that embrace them early, they will create new opportunities. They will enable new business models and advance digital transformation. Also, as digital human technologies are growing exponentially, a digital human market, which is already forming, will expand. (For an introduction to this topic, see Quick Answer: What is a Digital Human?)

With the proliferation of digital human technologies, true "multipresence" will be achieved. Multipresence means that a person is always available for interaction, regardless of their physical presence. This enables numerous applications in which the individual does not need to be physically present to complete several tasks simultaneously. People will be able to communicate (both socially and otherwise), buy, sell, learn and teach anytime, anywhere and in multiple places at once.

This themed wave of Maverick research explores various ways in which digital humans will impact our everyday lives at the workplace, in society, and as consumers. We hope it inspires you to think about how digital humans will change the world your organization operates in.

Yours faithfully,

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Executive Overview

The Maverick research program, part of the Gartner Futures Lab, is Gartner's incubator for unconventional, disruptive research and insight. Unconstrained by Gartner's typical process of consensus formation, analysts can take minority positions, introduce new topics, pioneer new research designs and explore longer time horizons. Maverick research helps you get ahead of the mainstream and take advantage of trends and insights that could impact your organization's strategy.

Research Highlights

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Augmenting, Displacing and Replacing Workers

Emerging technologies are being combined to create digital humans that can perform traditionally human roles in ways that are beyond the scope of today's task management practices. Ultimately, technological advances and cultural acceptance will pave the way for digital human employees.

Related Research

Maverick Research: Fire Your B2B Sales Development Reps and Replace Them With Digital Humans by Elizabeth Jones and Marty Resnick

It's time to fire your sales development reps. Progressive revenue and retention leaders use digital humans with generative AI, metaverse, AI and machine learning to increase early funnel productivity while also satisfying customers' desires to avoid human interaction with suppliers.

Maverick Research: Your Next Manager Will Not Be Human — You Will Love It by Agustin Rubini and John Kostoulas

Digital metamanagers will fully replace human managers within this decade, enabling new organizational structures and ways of work. Executive leaders should immediately prepare to apply this new concept to boost organizational performance and competitive advantage.

Maverick Research: Prepare for the Digital Backlash by Jim Scheibmeir, Mike Fang, Saikat Ray and Joachimm Herschman

The digital economy generates escalating private revenue without commensurate rises in taxable jobs and tax. It also places endless demands on the Earth's nonrenewable resources. A backlash is therefore brewing, for which executive leaders must revise their technology strategies.

Emerging as Artists

Digital humans will, over time, saturate the art market. This will have a homogenizing effect on artistic trends, which will be followed by a period of intense demand for human-created artistic works based on an "outlier" perspective.

Related Research

Maverick Research: Digital Humans Will Be the Artists That Define Our Era by Benjamin Arnberg, Jorge Lopez, Ran Xu and Marty Resnick

Within decades, digital humans will be dominant creators of visual and performance art, competing with each other for primacy in the art world and reflecting our era for future generations. Use this research to help plan for when digital humans become the authors of our cultural history.

Redefining Communities

Humans evolved in a world where personal interactions were limited to small communities, yet today we immerse ourselves in a planet-encompassing online world of digital interactions, including with digital humans, that we are ill-equipped to comprehend. The explosion of digital services has opened a door to many benefits, but also to serious problems ranging from hacking and data theft to cyberbullying, fraud, misinformation, disinformation and propaganda.

Related Research

Maverick Research: Humanity Needs Digital Townships to Thrive by Richard Bartley and William Dupre

The prospect of digital townships — online communities with collective security and governance interests — offers a glimpse of cyberspace utopia. Security and risk management technical professionals must innovate with emerging technology to address sociotechnical problems in the digital world.

Related Resources

Maverick Research: Experiment to Grow in Uncertain Times

Maverick Research: The Future According to Maverick

Gartner Futures Lab: Can Digital Humans Replace Your Sales Team?

Gartner Futures Lab Podcast (2023 Season)

Maverick Research: Metaverse Is the Ally for Smart Cities and Urban Sustainability