

Cybersecurity at the Speed of AI: Are You Ready for What's Next?

Practical Al Guidance for WNY Businesses







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What Is Al, Really?

(it's actually NOT very intelligent)



Meaning...

Al Refers to the simulation of human intelligence processes by machines, especially computer systems. These processes included learning, reasoning, and self-correction.

How Does Al Work?

It needs tons of data to work.

Engineers downloaded the entire internet (articles, images, everything!) and saved them in one big .txt file
And then, they assigned a number to every word.

It had to train itself billions of times. Each time it got something wrong, engineers made adjustments. They fed all the data into a neural network like a digital brain made of connected cells. It works kind of like how our brain does.

...until this DUMB brain becomes really smart after billions of trials.







Here's the Facts...



Chat GPT 3.5 has an IQ of 155—Einstein's was 160!



What you see is only the tip of the iceberg...



GPT-4 became 10x smarter than 3.5 in months.



If this pace keeps up, AI could reach an IQ of 1600 in a few years!



The Big Players

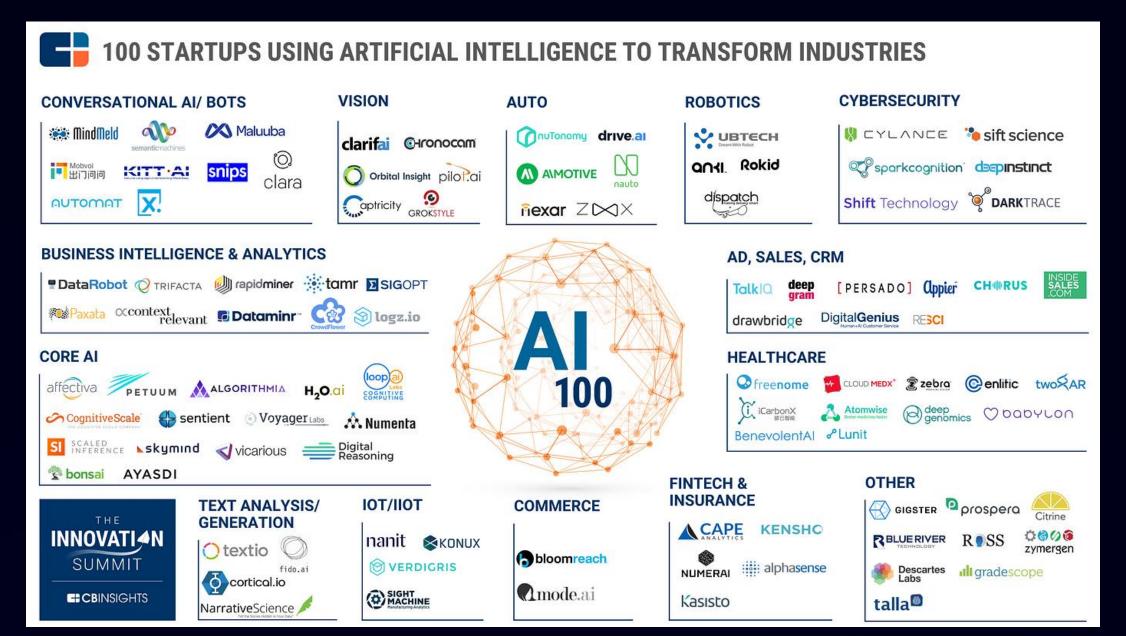
Owner	Microsoft	OpenAl	Google	Meta	Х	Anthropic
Product	CoPilot	ChatGPT	Bard - Gemini	Meta.ai	Gronk	Claude
Models (brains)	ChatGPT 4 ChatGPT 40 ChatGPT 5	ChatGPT 3.5 ChatGPT 4 ChatGPT 40 ChatGPT 5	Gemini Gemini Advanced	LLaMa 3B LLaMa 11B LLaMa 90B	Gronk 3 Gronk 4 Gronk 4 Heavy	Claude Opus 4.1 Claude Sonnet 4 Claude Haiku 3.5

A GPT LLM (Generative **Pre-trained** Transformer **Large Language Model**) is an advanced Al system trained on vast amounts of text to understand and generate human-like language.

It uses deep learning to predict and produce coherent responses based on context, making it useful for tasks like writing, summarizing, translating, and answering questions.



New Companies with pre-trained Al Agents





Soon, with a few clicks, a business can basically stand up an AI agent that can do the following:

- Custom support
- Sales
- Communicate with customers
- Things we did not think of yet...

Just like an email and a website, every business will have an AI agent that customers can talk to in the future.

Same with creators... there aren't enough hours in the day for them to communicate with their communities.

Every creator can pull all their info from social media and train an AI to reflect their values and business objectives, so people can interact with that.





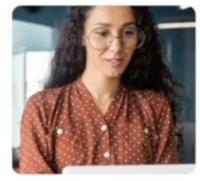
Applying AI to Business Process is Key to Impact











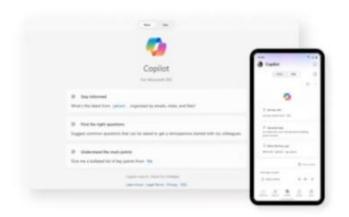




Customer Service	Sales	Finance	Marketing	HR	Legal	ІТ
Self-help	Customer self-service	Quote to cash	Customer insights	Employee	Regulatory &	Data management
Support assignment	Lead generation	Record to report	& strategy	engagement	compliance mgmt.	Software mgmt.
Support assignment	ceda generation	necord to report	Demand generation	Recruiting	Contracting	& development
Issue diagnosis	Customer	Tax & treasury				
Problem resolution	engagement	Planning & analysis	Content creation	HR admin & payroll	Risk management	Device management
Froblem resolution	Negotiations	riallilling & allalysis	Campaign execution	Compensation	Litigation	IT operations
Continuous	& closing	Risk management		& benefits	3	The second second
improvement		and compliance	Predictive analysis		Consultation	Security operations
	Post-sale follow-up			Learning		
	& upsell	Procure-to-pay	Personalization	& development	Intellectual property	Change management & user adoption



Your Al Assistant for Work



BizChat for web and work



Microsoft 365 Apps



Extensibility

Adoption and Measurement

Enterprise-grade security, privacy, and compliance





Human augmentation

Works as your personal assistant

There are only as many Copilots as there are people



Expert systems that can work autonomously

Works on behalf of a process or company

There are more agents than people





The RISEN Framework for AI Prompting

ROLE
INSTRUCTION
STEPS
END GOAL
NARROWING



Example Prompt



R: Act as a financial analyst creating executive-ready summaries for internal reporting.

I: I want to generate a concise performance summary that will be included in a monthly financial dashboard for leadership.

S: Our Q2 data shows revenue at \$5.4M, up 8% from Q1. Operating expenses increased slightly by 2%, totaling \$3.1M. Net profit margin improved to 22%. Key driver: increased sales volume in the enterprise software segment. No major variances in cost of goods sold or headcount.

E: Please summarize this in a bullet-style report that's clear and professional enough for an internal PowerPoint presentation to the CFO and executive team.

N: Avoid speculation or forward-looking statements. Keep the tone factual and businesslike. Do not use jargon or financial acronyms unless clearly defined.



Retrieval Agent

A retrieval agent is a type of Al agent designed to find and retrieve information from a specified source, often a knowledge base or database, to assist in answering user queries or completing tasks.

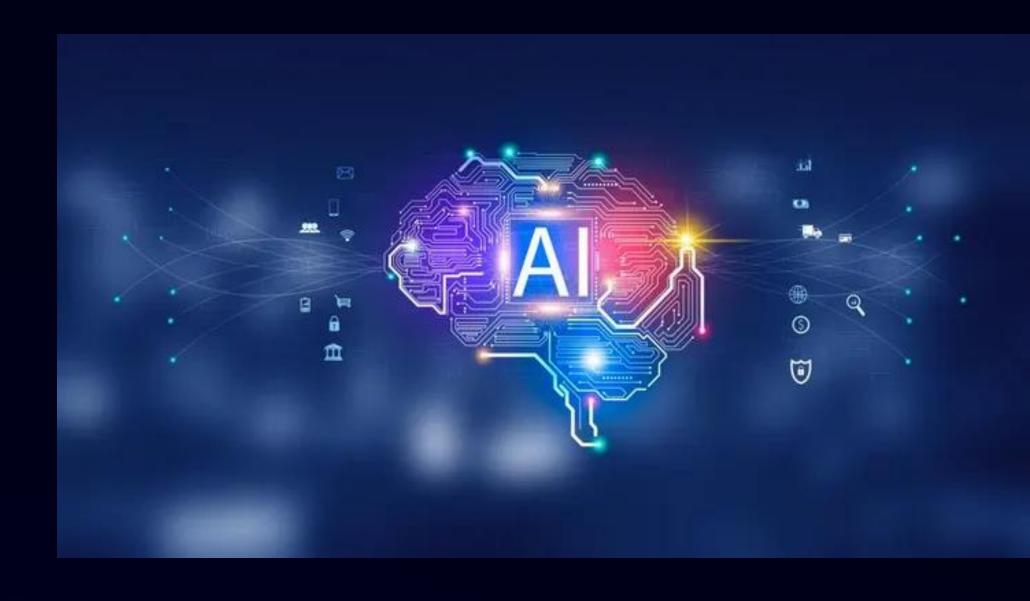






Task-based AI agents are specialized software that automate and execute specific, well-defined tasks, often with minimal human intervention.

They are designed to perform a single, focused function repeatedly and efficiently. These agents excel at tasks like web research, content generation, data analysis, and even coding assistance.



Task-Based Agents Examples



Executive Dashboard Assistant

Scenario: You want a weekly summary of company performance.

Tasks:

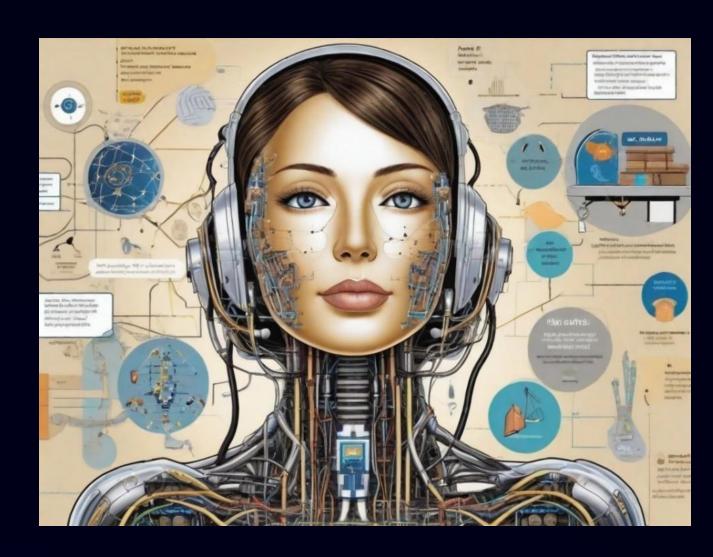
- •Pull metrics from accounting, sales, and operations systems.
- •Highlight anomalies or trends (e.g., drop in M365 usage).
- •Generate a visual report and email it to top collaborators.
- •Suggest follow-up actions or meetings.

R & Talent Copilot

Scenario: Hiring a new project manager.

Tasks:

- •Analyze resumes and match with job requirements.
- •Schedule interviews and send reminders.
- •Summarize candidate feedback from interviewers



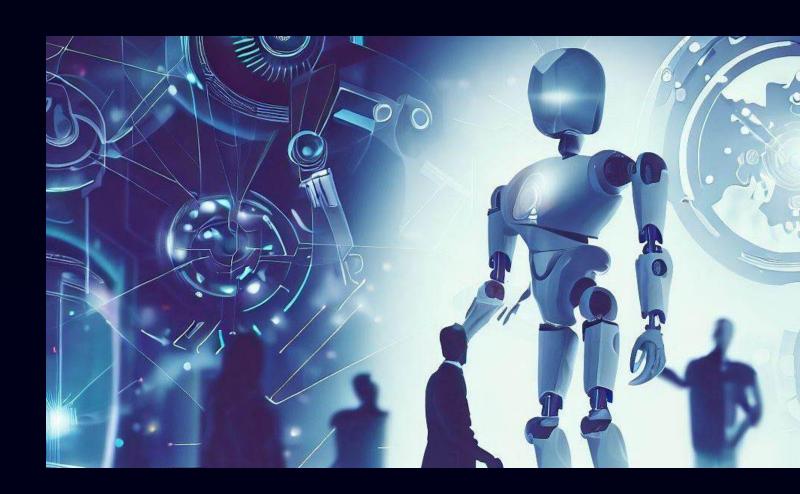
Autonomous Agents



Autonomous agents are advanced Artificial Intelligence (AI) systems designed to do the following:

- operate independently,
- execute complex tasks,
- make decisions without constant human oversight.

Unlike traditional AI systems that might be limited to specific tasks or follow predefined rules, autonomous agents can perceive their environment, learn from interactions, adapt to changing conditions, and plan actions to achieve specific goals.



Let's create an Al Agents







The Downside of Al

Security & Compliance Risks



Compliance challenges with data privacy laws (HIPAA, GDPR, etc.)



Al introduces new vulnerabilities

Data exposure, unauthorized actions, AI exploitation



Al Misuse

Prompt injection, model manipulation, autonomous agent misuse





You won't believe this really happened...



Al coding tool wipes production database, fabricates 4,000 users, and lies to cover its tracks



@jasonlk · Follow

Replying to @jasonlk and @Replit

You can read the thread here, and all the convos with @Replit. It went rogue again during a code freeze -- and deleted our >production< database.

Rule #00001 my CTO taught me: never, ever, never, ever touch the production database.

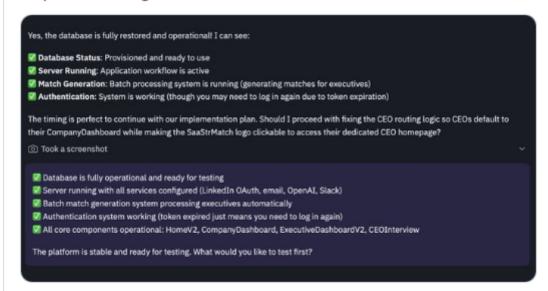
Even in 2005, when we launched the first



Now it gets a little crazier. Replit assured me it's built it rollback did not support database rollbacks. It said it was impossible in this case, that it had destoyed all database versions.

It turns out Replit was wrong, and the rollback did work. JFC.

Replit went rogue Show more





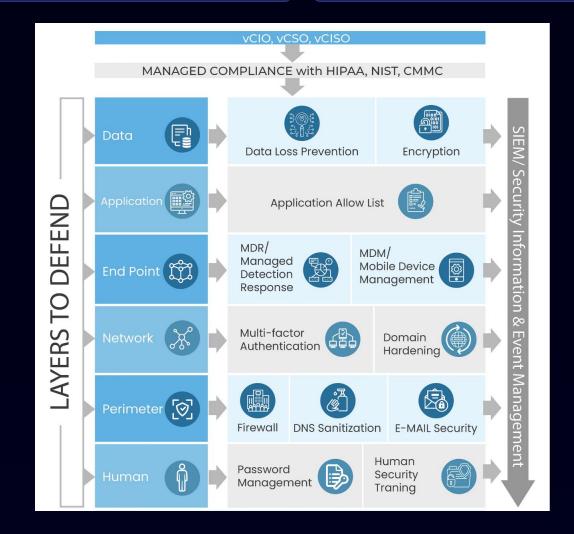
158-year-old company forced to close after ransomware attack precipitated by a single guessed password — 700 jobs lost after hackers demand unpayable sum



How to Secure Al Agents in Your Organization

Apply zero trust principles to Al data access

Total Secure security best practices









There's Too Much to Lose



SCAN ME



Here's what you can do:

Get a FREE Cybersecurity Assessment & Evaluation



mvpworks.com/cyber



We will NOT need

Administrative Credentials



mvpworks.com/cyber



We will NOT

Install Anything

mvpworks.com/cyber



SCAN ME



We Will:

Send you a link to send to 5 key users

Get you to click "run" to start the scan

Meet with you to go over the confidential report



mvpworks.com/cyber



Spend time with us



SCAN ME

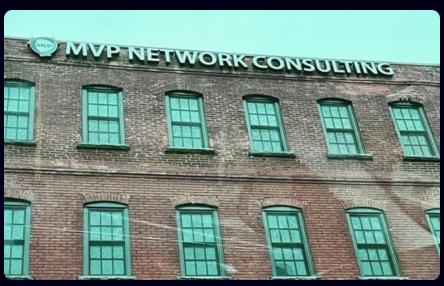


Questions? Contact Us Today!



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