

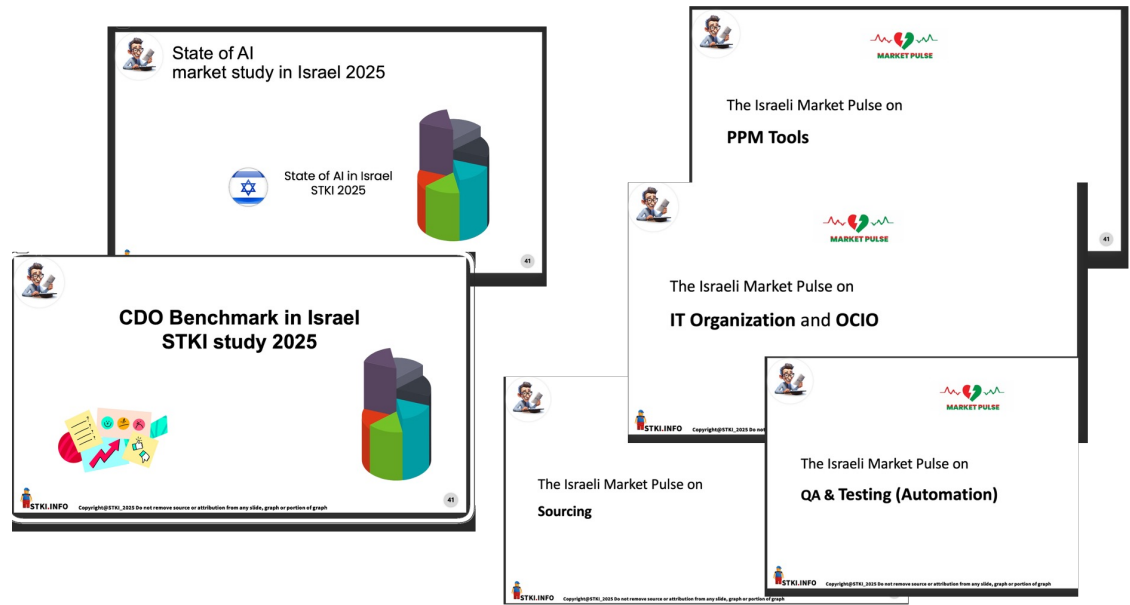
RETHINKING THE FUTURE

STKI Summit 2025

Agentic AI

STATUS-QUO
CHALLENGERS
EXPLORERS
DOT CONNECTORS
IMAGINATIVE
CRITICAL THINKERS
PROBLEM SOLVERS
SYSTEM THINKERS
ADAPTABLE
INFLUENCERS
COLLABORATORS
CURIOUS
CONTINUOUS LEARNERS
CREATIVE

THE ILLITERATE OF THE 21ST CENTURY
WILL NOT BE THOSE THAT
CAN'T READ OR WRITE,
BUT THOSE WHO CANNOT LEARN,
UNLEARN, AND RELEARN

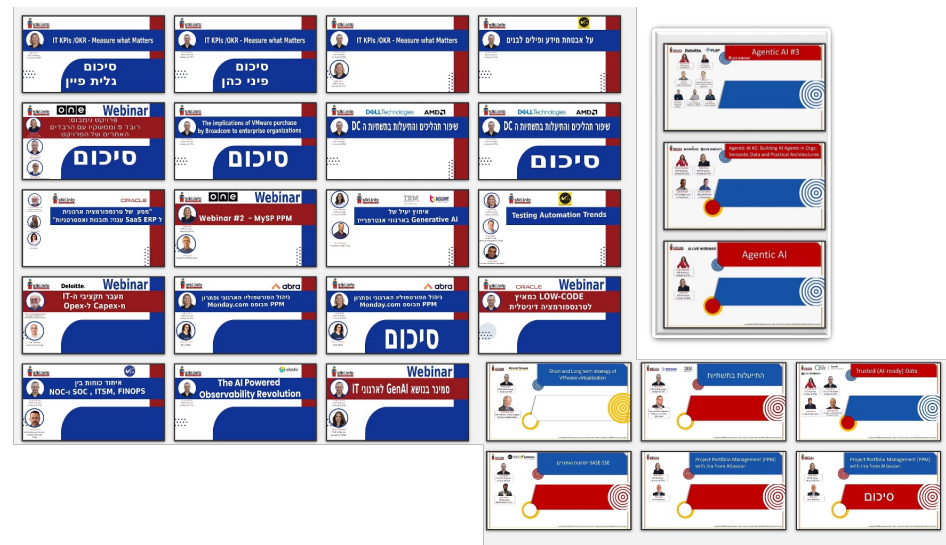


STKI Staffing Ratio Research



In Enterprises IT

- Infrastructure
- Cyber
- Operations



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Career spans research, consulting, academia, and military service.

Served in Egoz and Mafat
 Founded several startups and held senior roles at META Group, Kesselman Consulting, Booz Allen and Arthur Andersen, served as a marketing professional with Digital Equipment. Published in international conferences and taught innovation at Tel Aviv-Yaffo Academic College.

Degrees in:

Engineering (BSE & MSE)
 Univ. Central Florida,
 Systems Science (MSIA, ABD)
 Carnegie Mellon University
 Business & Entrepreneurship (DBA)
 from Case Western University

Dr Jimmy Schwarzkopf

Founder of STKI (META Israel) 1992
 Leading Business Technologies Market
 Research and Strategic Analyst Firm in Israel

What I cover

- Israel IT market strategies
- Strategic CIO management issues and strategies.
- New Technologies and their marketing issues and strategies



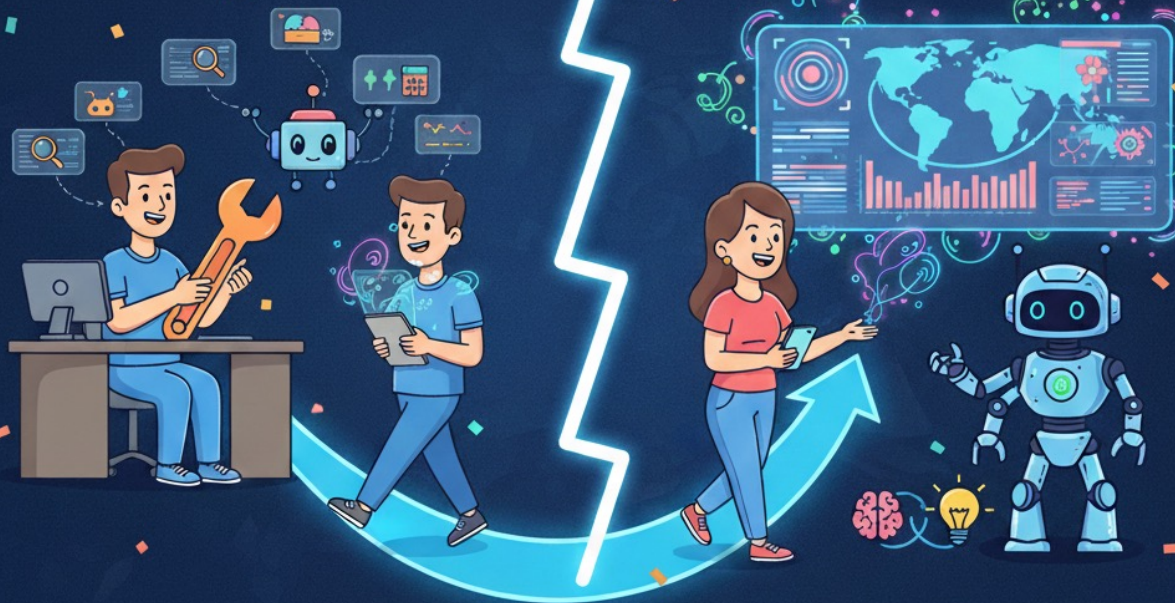
HIGHLY RECOMMENDED AI READS!



AI Journey FROM INTELLIGENT TOOLS TO INTELLIGENT PARTNERS

INTELLIGENT TOOLS

INTELLIGENT PARTNERS



AI journey
from
intelligent tools
to
intelligent partners



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The "Productivity Paradox" of Modern Tools

Value is the holistic, strategic, and qualitative benefit that an investment provides

AI Value



Challenges calculating ROI for Ubiquitous Tools

(AI, Browsers, Office 365, Laptops, Smartphones)

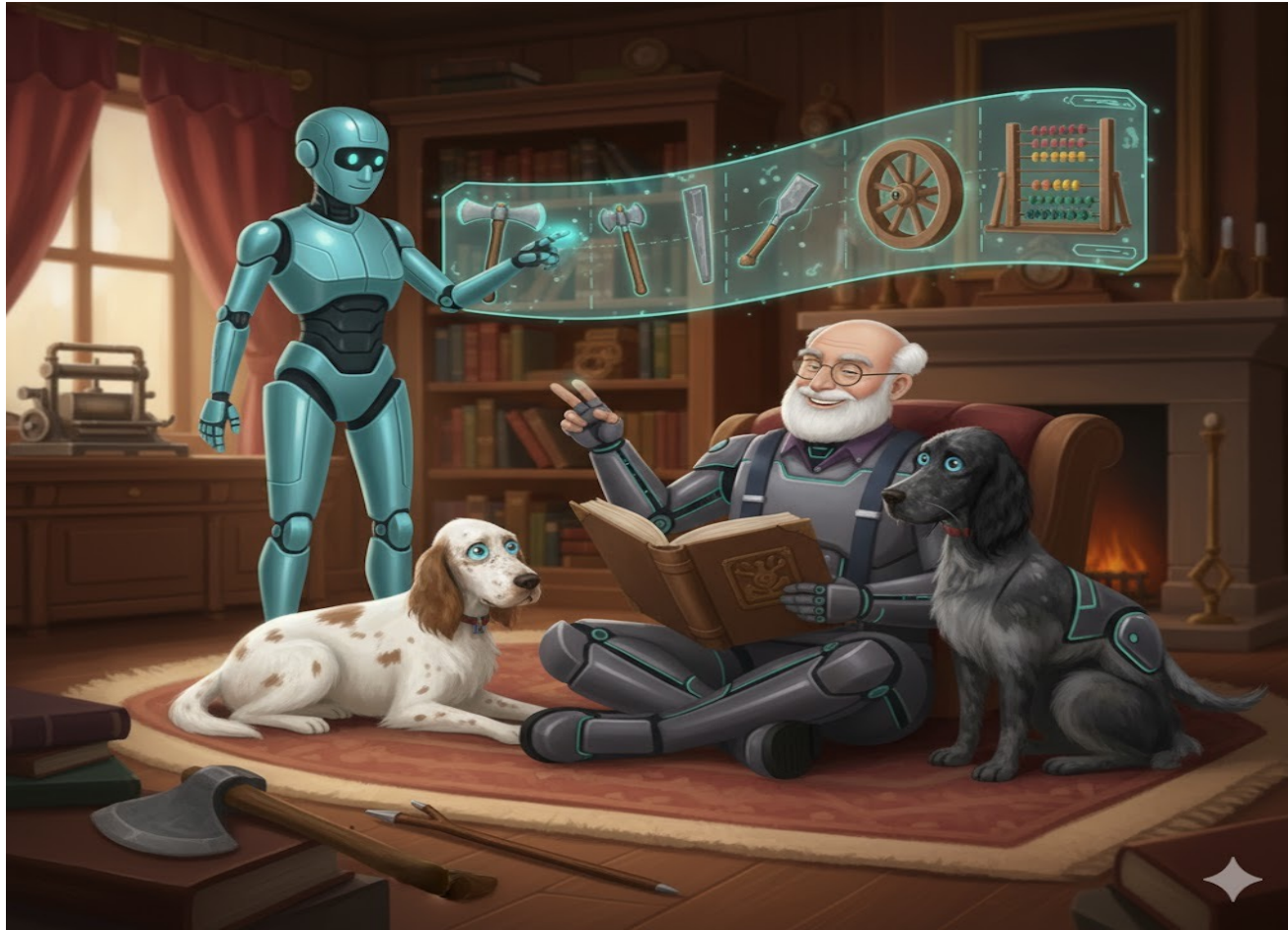
- The **"Isolation & Mixed use"** Challenge
 - You *cannot isolate one variable (like AI) to measure its individual contribution to the final output.*
- The **"Qualitative Output"** Challenge
 - *Traditional metrics (like "units per hour") fail to capture the value of qualitative improvements.*

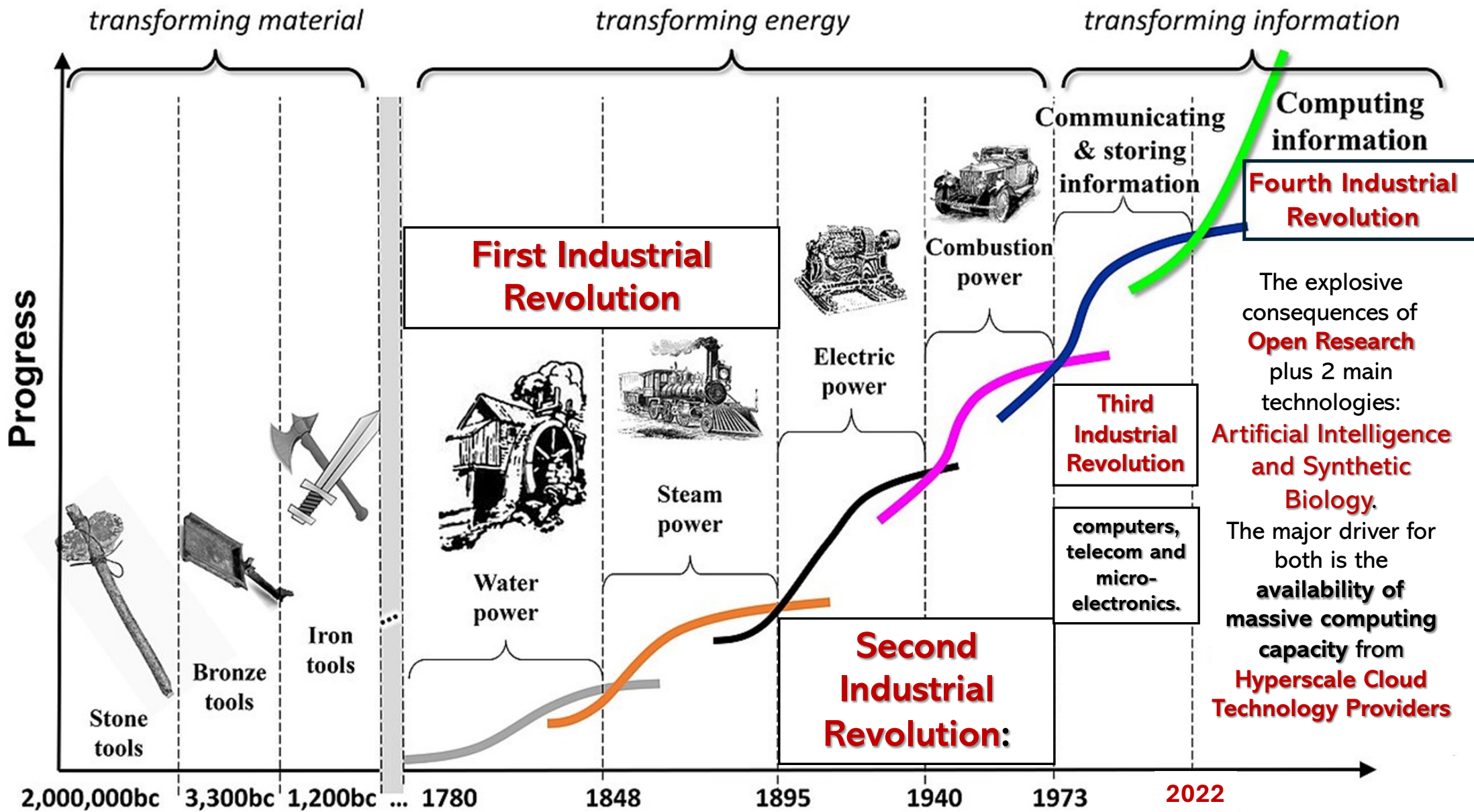
ROI is a specific, quantitative, financial metric. Measures the profitability and efficiency of a *past* investment.

AI ROI



From Stone to Silicon: Artificial Intelligence's Place in Our Technological Story







biggest technological shifts of our lifetime;
and fundamentally will **change everything**



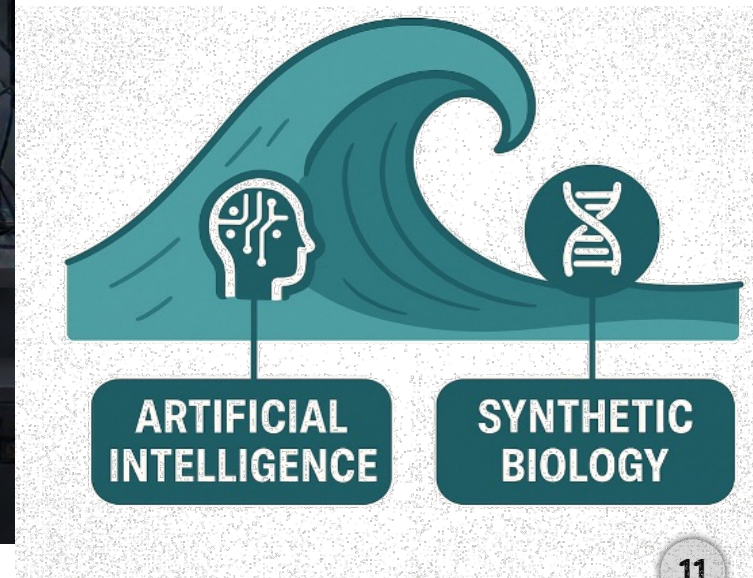
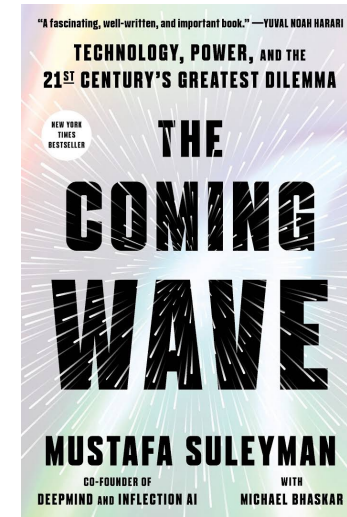
Synthetic Biology



Category	Innovation	Status & Breakthrough (2024-2025)
Living Systems	Synthetic Yeast	The first fully synthetic eukaryote genome. Features a "neo chromosome" (new-to-nature chromosome)
Living Systems	Anthrobots	"Living robots" self-assembled from adult human tracheal cells (no genetic edits).
Core Tech (AI)	Evo 2 (BioLLM) Also, in Israel	"Biological Large Language Model" trained on DNA from 100k+ species. It can predict mutations and generate entirely new DNA/protein sequences
Healthcare	Smart Biosensing Tattoos	Bio-responsive inks that change color in response to interstitial fluid biomarkers (glucose, pH).
Consumer	Brewed Protein™ Textiles	Spider-silk mimics produced via fermentation.
Food Tech	Precision Fermentation Dairy	Chemically identical milk proteins (whey/casein) made by yeast. From Israel, commercial products (cream cheese, milk) hitting shelves.
Manufacturing	Enzymatic DNA Printing	Desktop DNA printers that use enzymes (TdT) instead of toxic chemicals.



INTELLIGENCE AND LIFE CONQUERED



I will **fuse two theories** in order to explain better “**what is happening now**”



Professor Shumpeter

Professor Perez

The Fused Theory of Innovation Cycles



CREATIVE DESTRUCTION refers to the **significant changes** brought by new tech to **all business ecosystems**



AI as the **Architecture** of Future Technologies:

- AI will replace most individual IT components (ranging from databases and middleware to networking) making most tech obsolete.

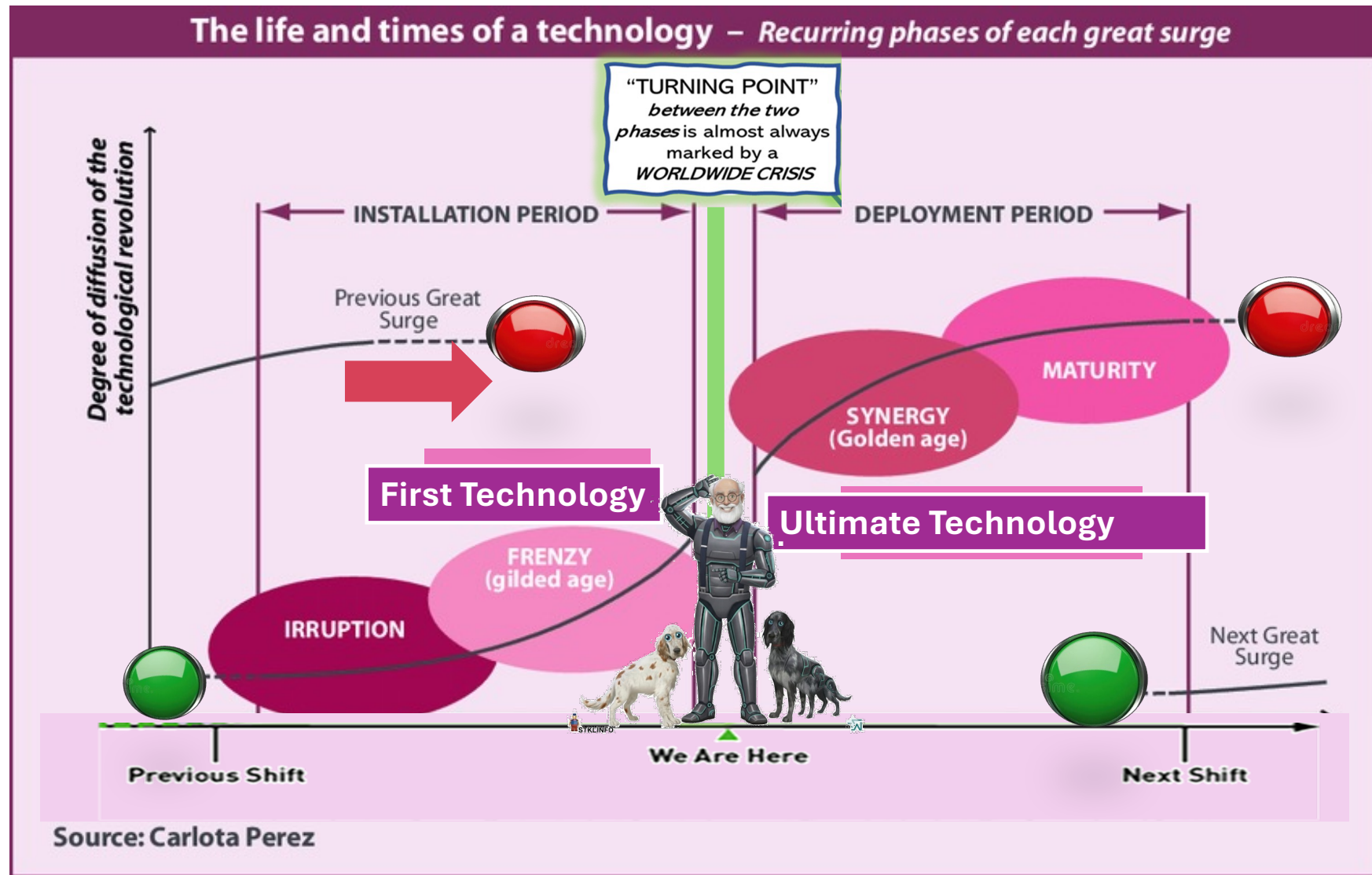
New business's model :

AI-Native Organizations

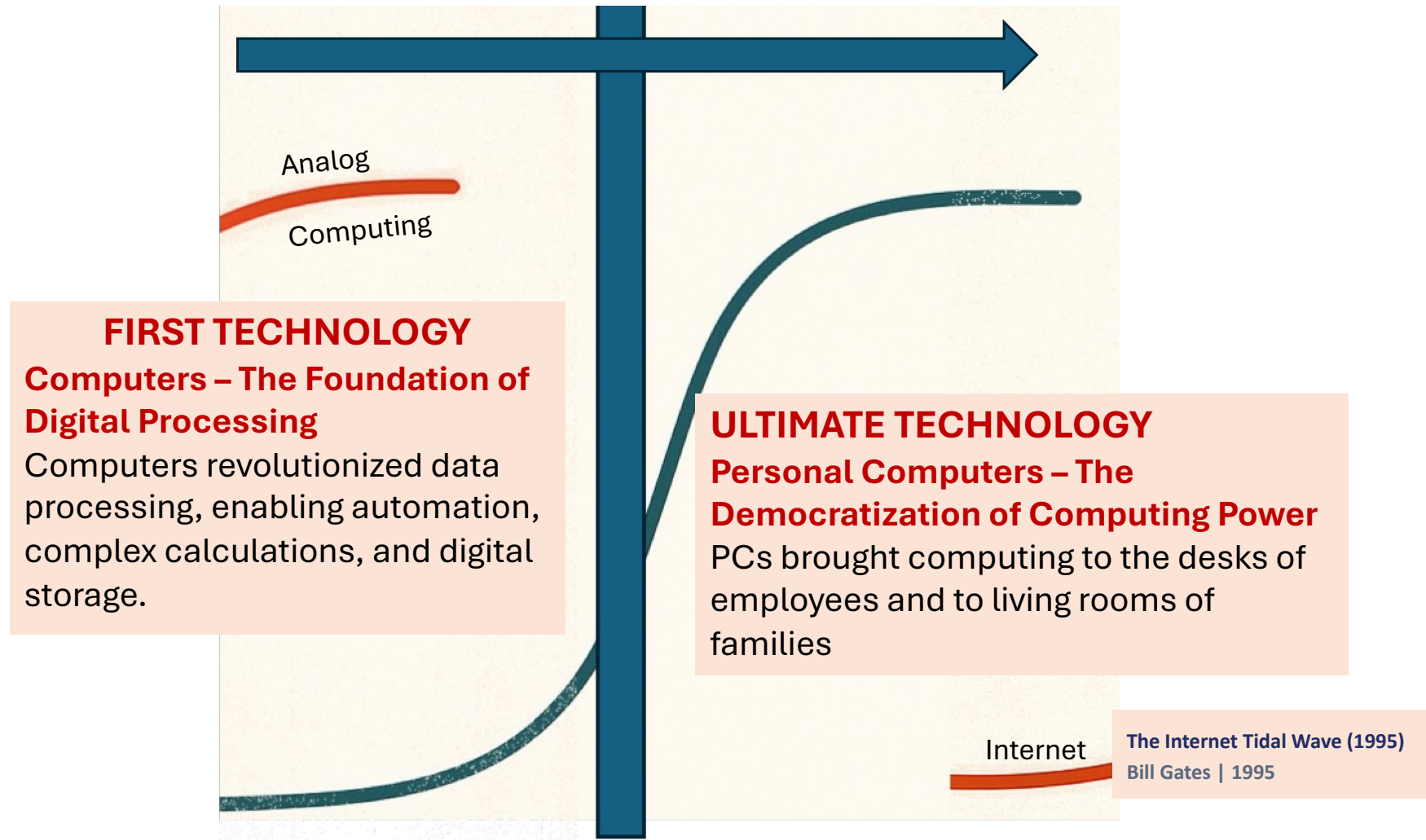
- They are a new breed of organizations that are fundamentally reimagining what's possible. They're not just automating tasks, they're creating self-operating businesses; scale effortlessly, adapt continuously, and never sleep



The life and times of a technology – Recurring phases of each great surge



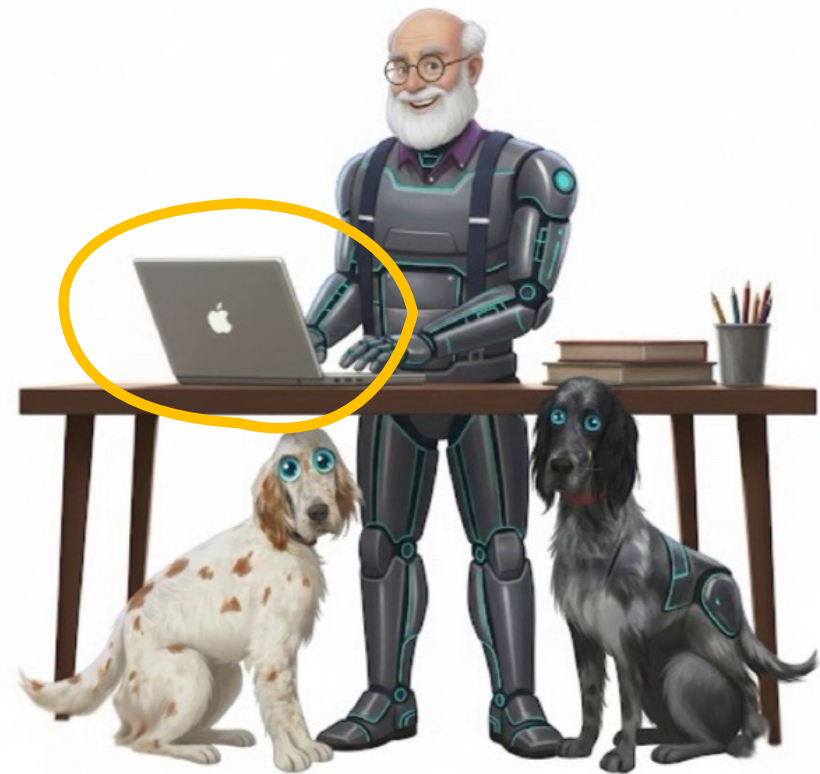
Creative Destruction & Technological Transformations 1



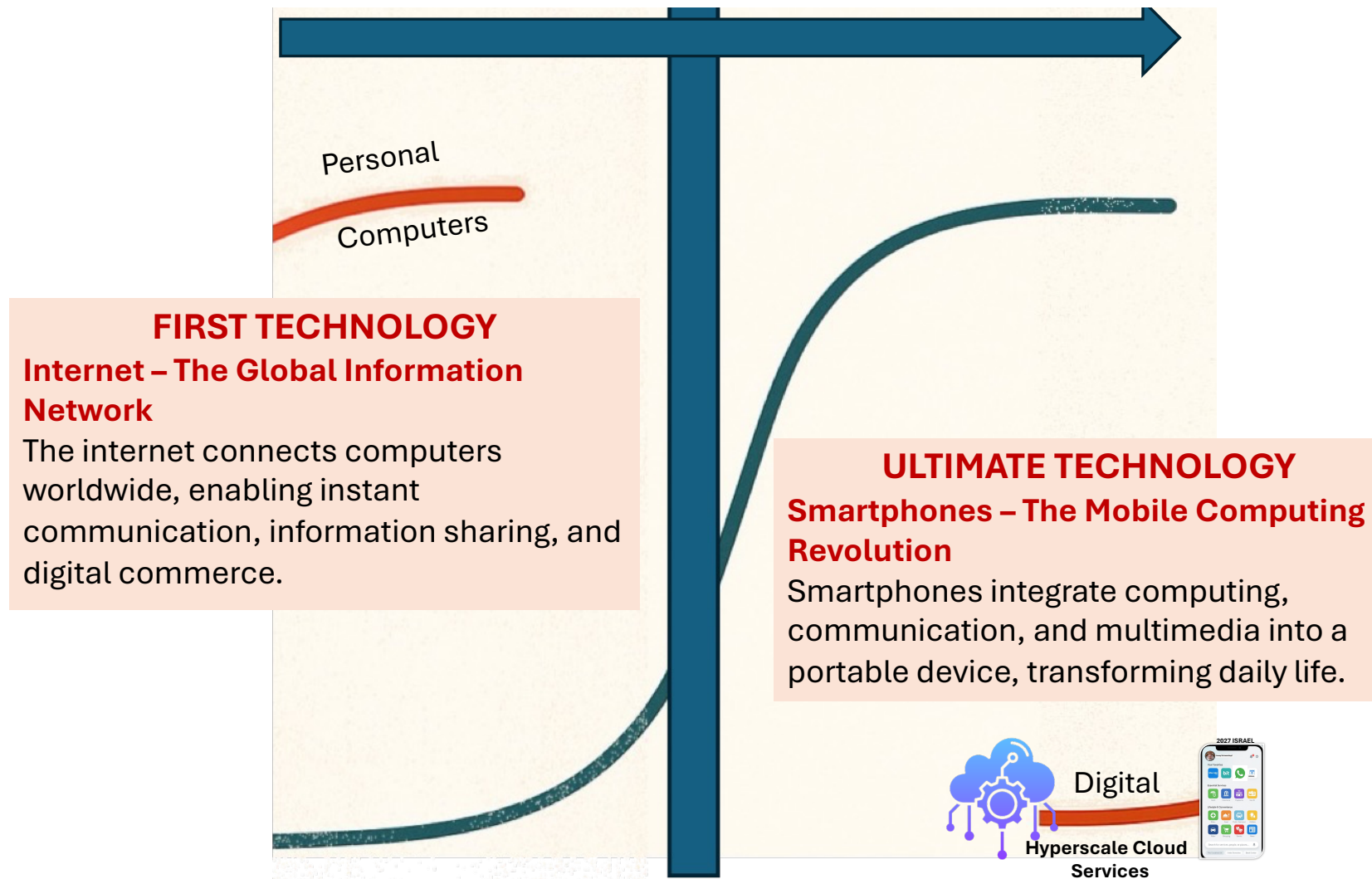
What's the ROI on Your Laptop?

"How many people do an ROI for a laptop? No one. You couldn't even do your job without it."

— Jeetu Patel, Cisco



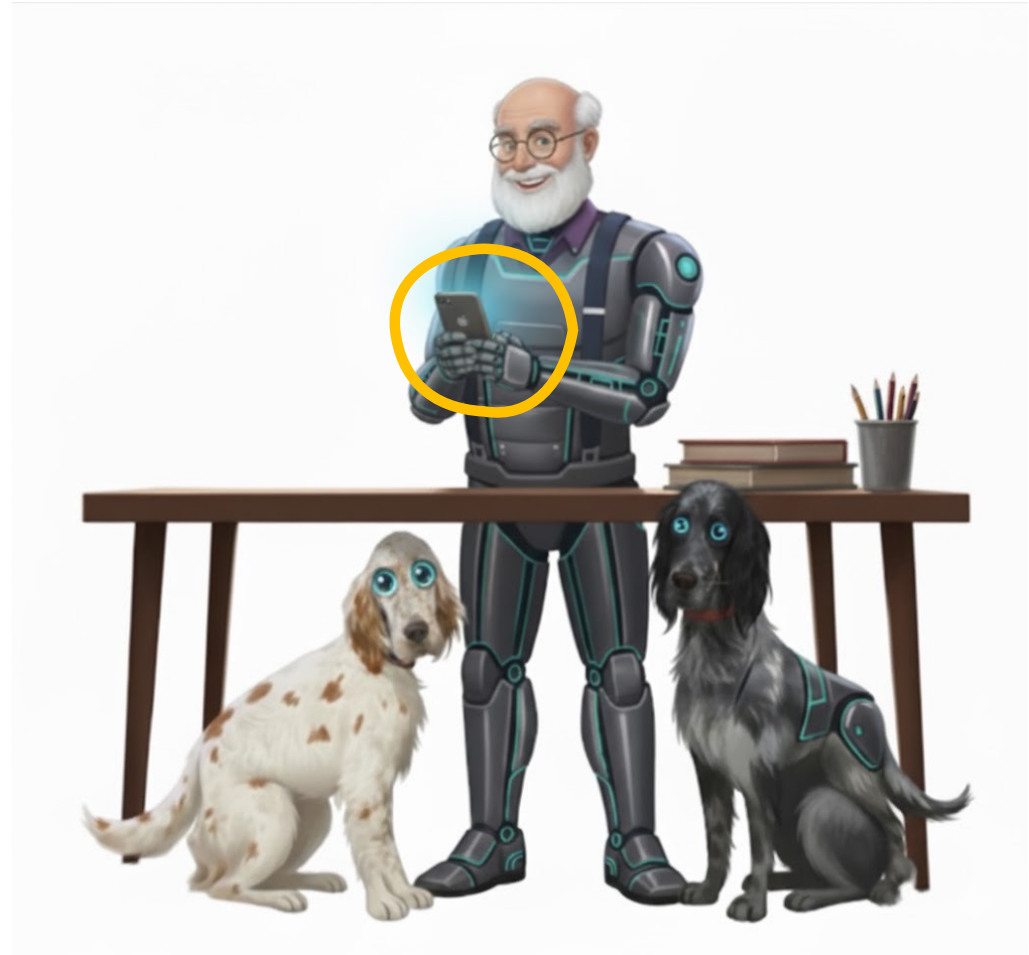
Creative Destruction & Technological Transformations 2



What's the ROI of your SMARTPHONE

How many people do an ROI for a smartphone?

NO one, it is part of every person's "must have appliance for quality of life and work "



THE ULTIMATE SUPERAPP



Digital 2027: SuperApps are coming (FINALLY)

A SuperApp is an **all-in-one ecosystem** that:

- **bundles a wide variety of unrelated services,**
- **hosts third-party "mini-programs"**
- allows users to handle diverse tasks **without ever leaving the app.**

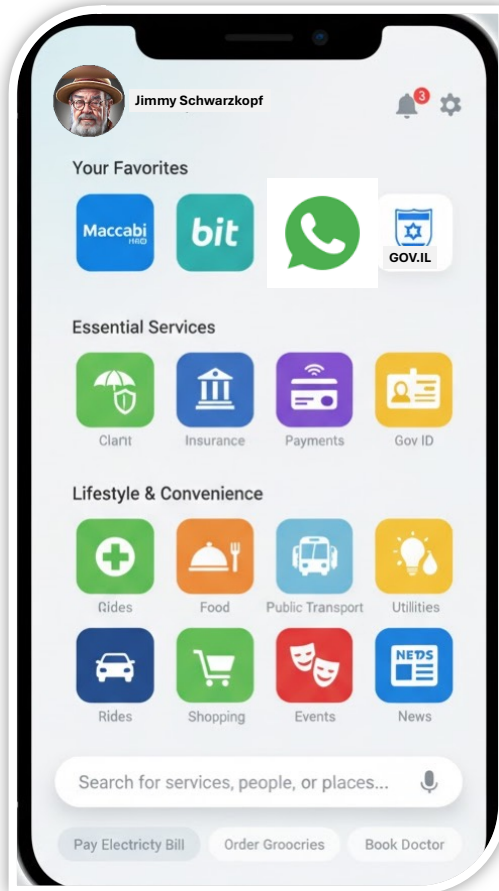
SuperApps are **not popular yet in Israel** as they are in Asia but: **Medical (HMOs), gov.il, retail/energy, rideshare, financial institutions and payment companies**

STKI is sure that the **first generation Israeli SuperApps by 2027**



Examples of SuperApps

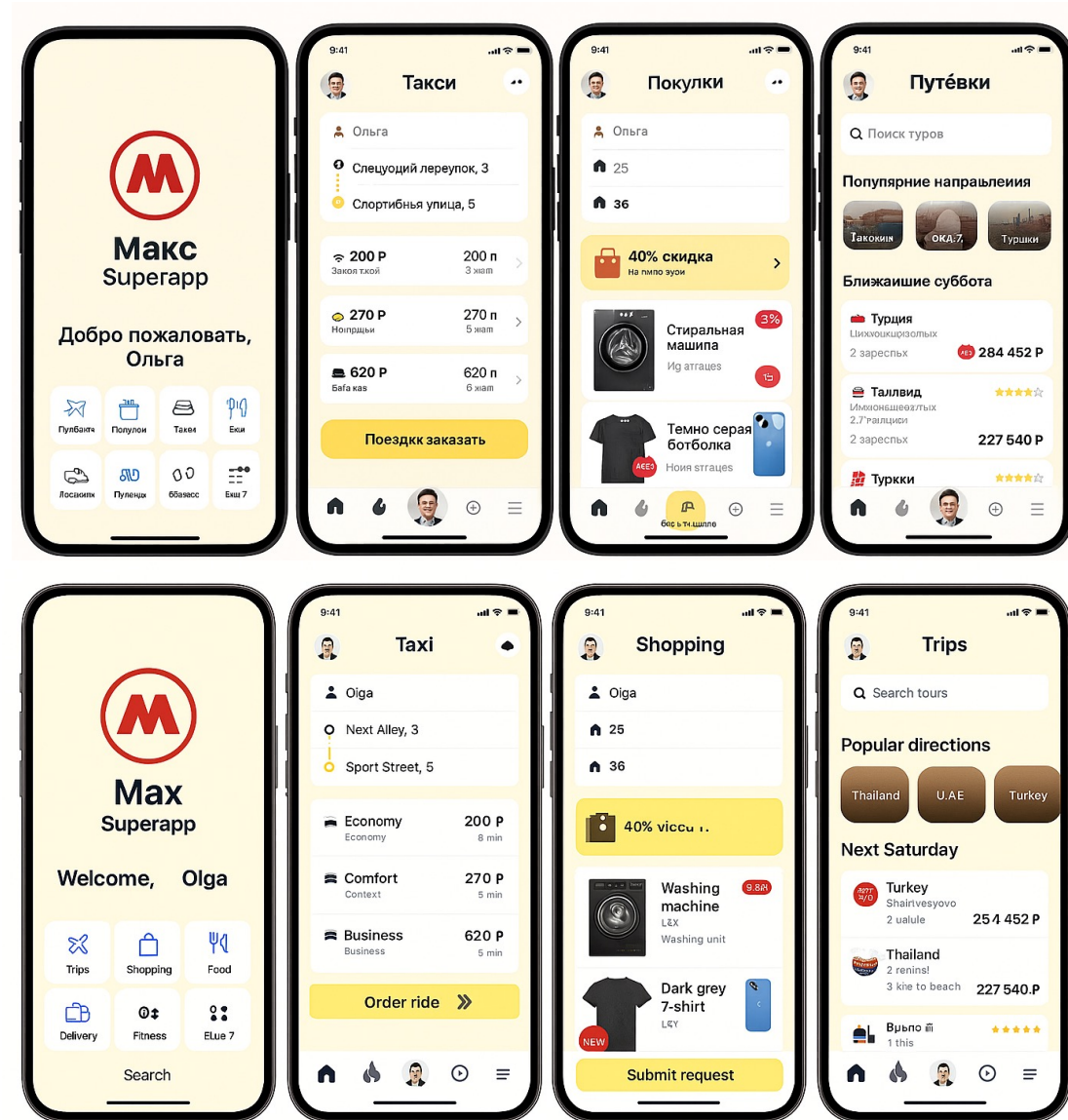
2027 ISRAEL



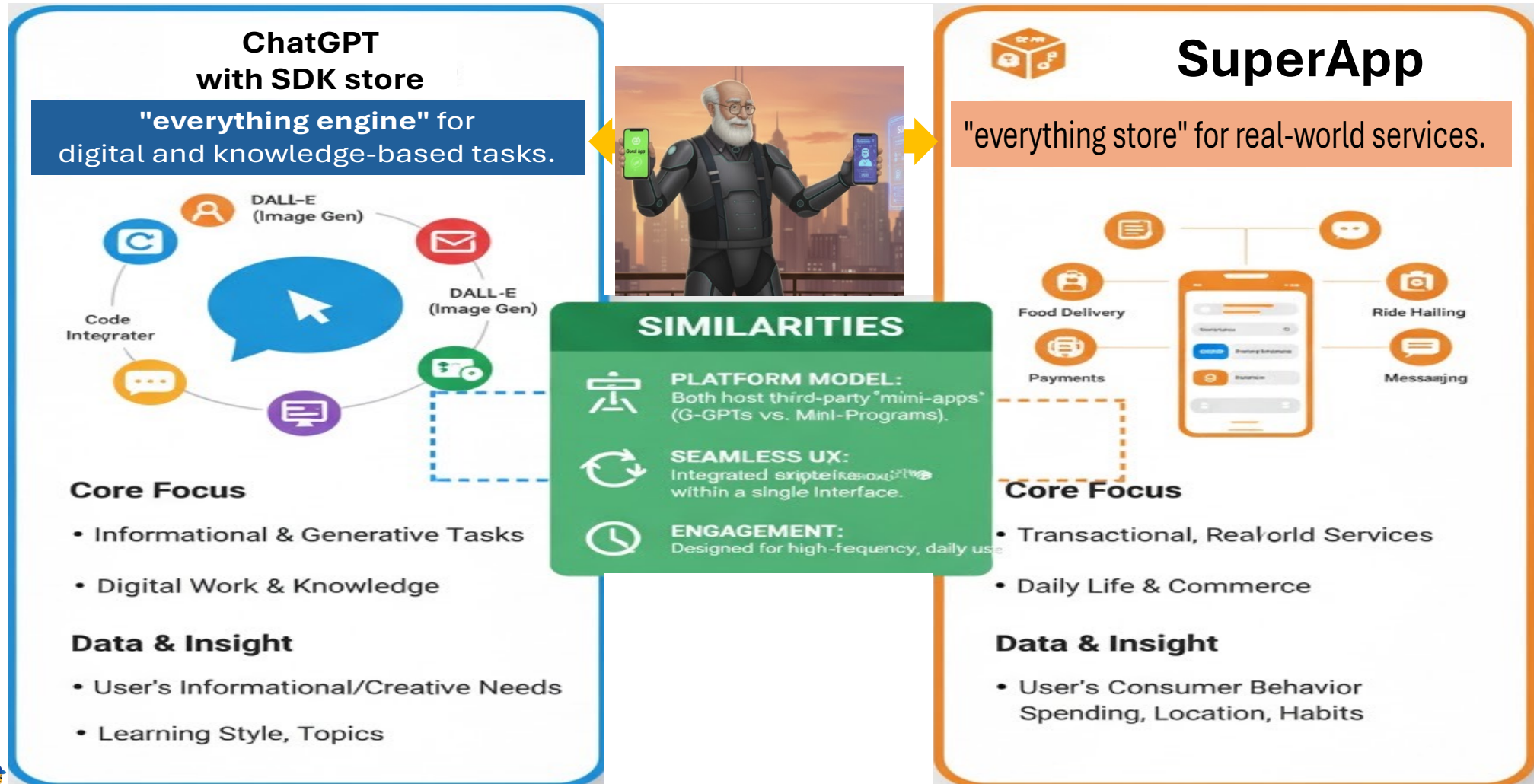
Region	Superapp	Core Origin	Key 2025 Innovation/Status
SE Asia	Grab / GoTo	Ride-hailing	Deep integration of digital banking and AI-led food recommendations.
C. Asia	Kazakhstan's "State-in-an-app"	Fintech	GovTech: all gov services plus payments and tax/notary services.
Africa	M-Pesa	Telecom/ Money	"Fintech 2.0": "Offline Mode" for payments and a dedicated "M-PESA GO" mini-app for teens.
N. Africa	Yassir	Ride-hailing	The "Uber of Algeria" that grew into a full ecosystem for rides, groceries, and banking.
Europe	Revolut	Banking	Financial Superapp: Moving beyond banking in 2025 with the launch of mortgages,
S. Korea	"AI Super App"	Messaging	integrating OpenAI-powered agents directly into chat streams



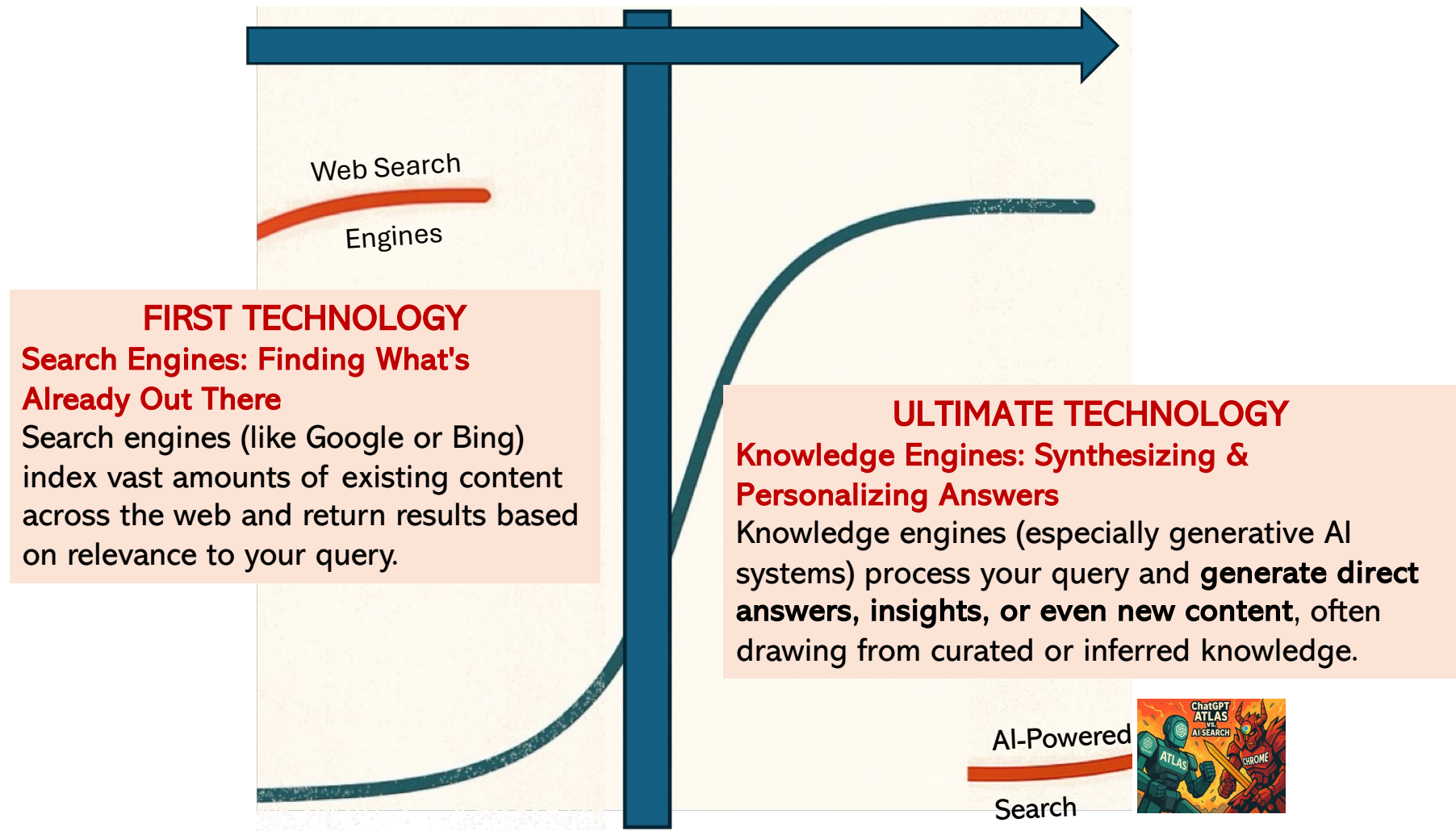
- **President Vladimir Putin** has backed **MAX SuperApp** as part of a state-led effort to build a **sovereign digital ecosystem** aiming to **reduce reliance on Western technologies**
- Raising concerns among critics about increased state oversight and the potential for expanded surveillance.
- Positioning the platform to **standardize**:
 - messaging, payments, government services, digital identity across the country, etc.



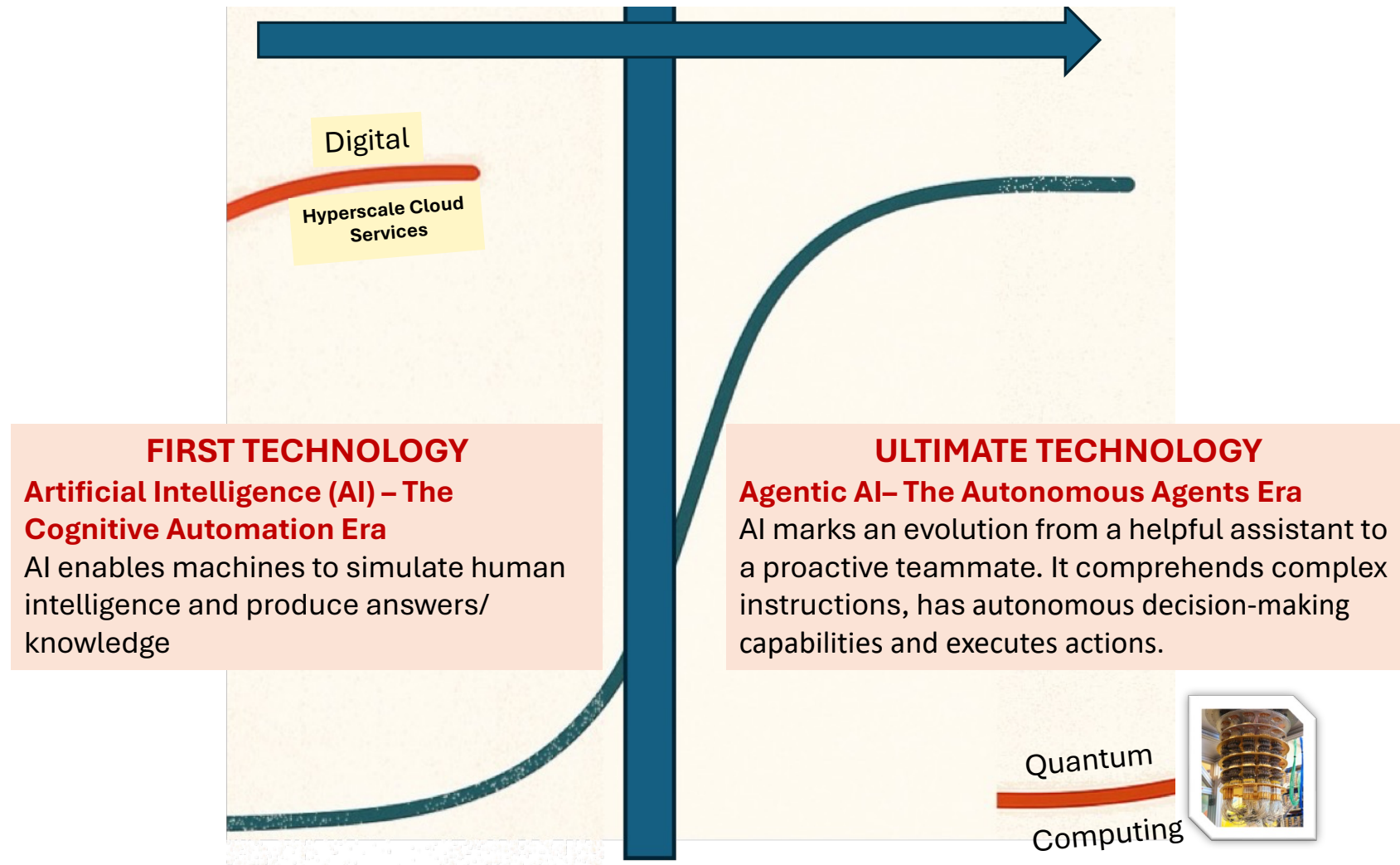
Is ChatGPT SDK a “SuperApp” ?



Creative Destruction & Technological Transformations 3



Creative Destruction & Technological Transformations 4



What is the ROI of GenAI, AI Agents and Agentic AI

Traditional return on investment (ROI) is an inadequate and potentially harmful approach for evaluating ubiquitous AI partners (like enterprise-wide AI assistants or large-scale agentic systems).

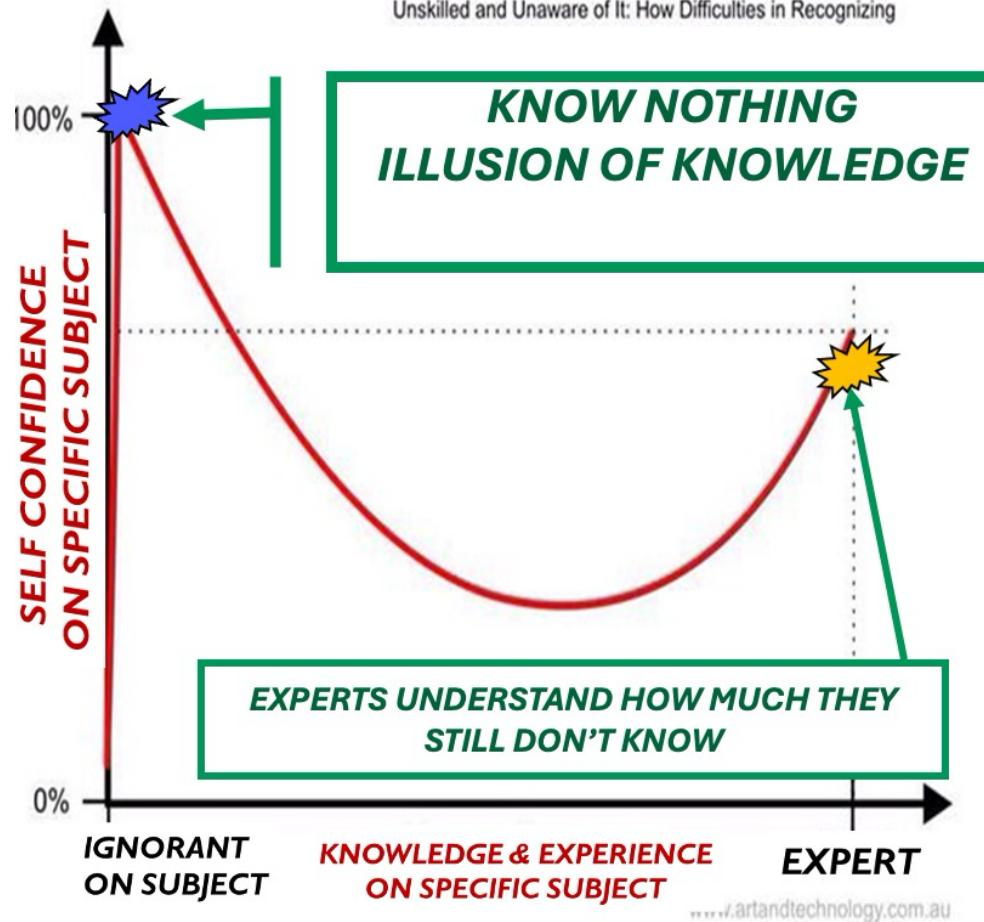
The fundamental issue is that AI's value is strategic, pervasive, and non-linear, whereas traditional ROI is designed for discrete, short-term, linear capital projects.





Dunning-Kruger Effect

Unskilled and Unaware of It: How Difficulties in Recognizing



IGNORANT ON SUBJECT



EXPERT ON SUBJECT







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🧠 AI-Native Institutions

These are organizations built from the ground up with artificial intelligence as a **core principle**, not just tools.

⚙️ AI-Enhanced Institutions

These are traditional organizations that **integrate AI into existing processes** to **improve performance**.

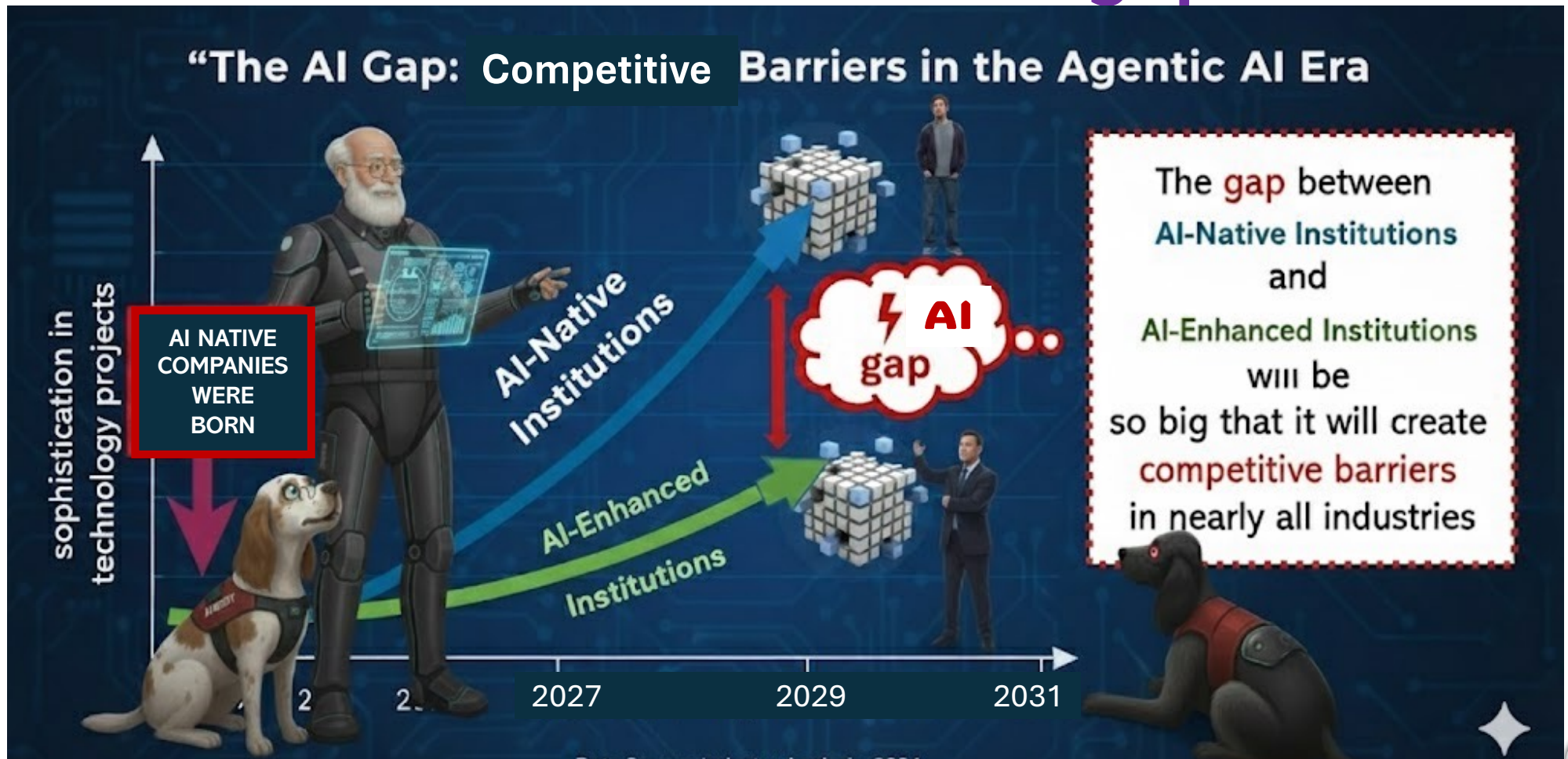
🤝 Co-existence Ecosystem

A symbiotic relationship where an "AI-native" company builds a core AI platform, which then enables "AI-enhanced" companies (often traditional businesses) to connect to it.

This coexistence fundamentally restructures and changes the entire ecosystem for that industry.

DIGITAL GAP of 2020-2024 is now the AI GAP of 2026-2030

Can co-existence close the gap??????





CO-EXISTENCE

Coexistence is a symbiotic relationship where an AI-native company builds a core AI platform that AI-enhanced (usually traditional companies) connect to, integrate with and extend/ change their operating model.

The AI-native and the AI-enhanced companies mutually reinforce one another:

- *AI-native companies* **supplies shared capabilities and data;**
- *AI-enhanced companies* **contribute usage, domain knowledge, and demand;**
- *Together* they **reshape the industry's operating model**, products, and value chains.



CO-EXISTENCE examples

- **AI-Native Company:** Aidoc
- **AI-Enhanced Partners:** Major Israeli hospitals (e.g., Soroka Medical Center)

WAZE: Reshaping Urban Mobility & Industry



easier driving, transformed logistics, enabled food and groceries delivery, Ride-hailing and taxis, etc.

CO-EXISTENCE examples

AI-Native Company: Taranis or Agroscout

AI-Enhanced Partners: Israeli farmers and large agricultural co-ops (like Granot),

Ecosystem Change: The farmer (AI-enhanced) uses the AI platform that captures ultra-high-resolution imagery of the fields from drones or planes. The AI analyzes these images to identify individual weeds, insects, and diseases at the "leaf level." It then generates a "prescription map" that tells the farmer's tractor *exactly* where to spray.

AI-Native Company: Buildots

AI-Enhanced Partners: Major Israeli construction companies (e.g., Shikun & Binui, Danya Cebus).

Ecosystem Change: The construction company (AI-enhanced) site managers have hardhats mounted with 360° cameras. As they do their normal walkthroughs, the video feeds into the Buildots AI platform. The AI compares the *actual state of the site (from the video)* against the *planned state* (from the digital blueprints), identifying every missing pipe, uninstalled window, or incorrect socket.



- **AI-Native Company:** Aidoc
- **AI-Enhanced Partners:** Major Israeli hospitals (e.g., Sheba Medical Center, Ichilov) and hundreds of others globally.
- **Ecosystem Change:** Aidoc's AI platform integrates directly into the hospital's imaging system. It acts as an "always-on" AI-radiologist,

AI-Native Company: Shopify

AI-Enhanced Partners: Millions of independent merchants, small businesses, and direct-to-consumer

Ecosystem Change: Shopify provides a massive, AI-powered backend for e-commerce. It uses AI for everything from product recommendations and "Shopify Magic" to sophisticated fraud detection ("Radar")

AI-Native Company: BioCatch

AI-Enhanced Partners: Israel's largest banks (Bank Hapoalim, Bank Leumi)

- **Ecosystem Change:** from static, knowledge-based security to **dynamic, behavioral-based security**. Even if a scammer has your password, they can't replicate your behavior, AI flags the transaction in real-time.

FEAR OF “NEW” TECHNOLOGIES 1800s -2026



- **Luddites** destroy textile machines (1811–1816)
- Fear of industrial pollution and child labor (1820s)
- Telegraph and railroads spark fears of speed and disconnection (mid-1800s)
- Electricity and X-rays cause health panic (late 1800s)
- Automobiles seen as dangerous and disruptive (early 1900s)
- Nuclear technology and atomic bomb fears (1940s–1950s)
- Computers feared for job loss and surveillance (1960s–1980s)
- Internet panic: privacy, addiction, misinformation (1990s–2010s)
- **Vaccinations (mRNA & Protein-based technologies) (2019-present)**
- **AI and automation fears (2022–present)**



MODERN LUDDITES



Fear of Job Loss: Their core concern is that these technologies will *lead to widespread white-collar unemployment*, specifically replacing cognitive and creative labor.

Human Control: They are worried about the *loss of human control and agency as AI systems* become more autonomous and integrated into daily life:

Example: ChatGPT, announced a significant policy change that will allow **verified adult users** to *generate erotica and other mature content starting in December 2025.*





Are we ready to hand AI agents the keys?

We're starting to give AI agents real autonomy, and we're not prepared for what could happen next.

EXAMPLE:

On May 6, 2010, nearly a **trillion dollars evaporated from the US stock market within 20 minutes**.

Regulators attributed the **responsibility for this "flash crash" to high-frequency trading algorithms (AI Agents V1)**

The flash crash is probably the **most well-known example of the dangers raised by AI agents**



Defining the Future

GenAI, AI Agents & Agentic AI

GenAI & AI Browsers



Creates new images, code, etc.

AI Agents



Performs specific tasks with instructions: scheduling, reminders, fetching info.

Agentic AI



Autonomous goal-driven systems: plans, executes, and adapts to achieve objectives.

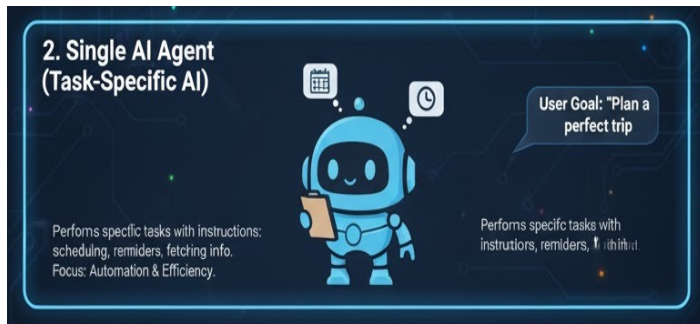
from creation to autonomous action



GenAI, AI Browsers, AI agents, and Agentic AI: distinct concepts



GenAI & AI Browsers refer to AI systems that can *generate new content* (text, images, audio, code, etc.) based on patterns learned from data. Basic building block for AI agents and Agentic AI



AI agents are *single (atomic) software entities* that execute single process, connect to a tool or another agent in order to *take actions to achieve specific tasks*.



Agentic AI is an *AI system comprising multiple, coordinated AI agents* that collaboratively execute complex processes to achieve a predefined goal while actively coordinating, communicating, and sharing data.












Leader	The Old Way	The New Way
Satya Nadella (Microsoft)	Humans clicking menus in software.	Agents talking to databases directly.
Sam Altman (OpenAI)	Using 10 different apps.	Using 1 "Super- Assistant." (AI SuperApp)
Josh Miller (Browser Company)	You visiting a website.	The Browser visiting it for you.
Aravind Srinivas (Perplexity)	Searching for links.	Asking for answers.



What are : Knowledge Engines and AI Browsers

 Feature	 Search Engine	Knowledge Engine 
Feature	Search Engine	Knowledge Engine
Output Type 	List of links	Direct answers or generated content
User Role	Investigator	Collaborator
Context Awareness	Limited	High
Personalization	Minimal	Strong
Interactivity 	One-shot query	Ongoing dialogue
Data Source 	Web-indexed content	Curated + generative models 

INTELLIGENT BROWSER CATEGORY BORN 10/2025



AI Browsers unveiled on 10/2025

blend search, productivity, and personalization



The "Click" Web (2025):

The Old Model is Obsolete: The **click-driven** advertising model is being replaced

- Search "Mediterranean Bistro near me."
- Click 3 different links to check menus.
- Click in **Gouje & Daniel** link after I decide
- Click another link to TABIT to check times.
- Fill out a form to book.

The "No-Click" Web (2026):

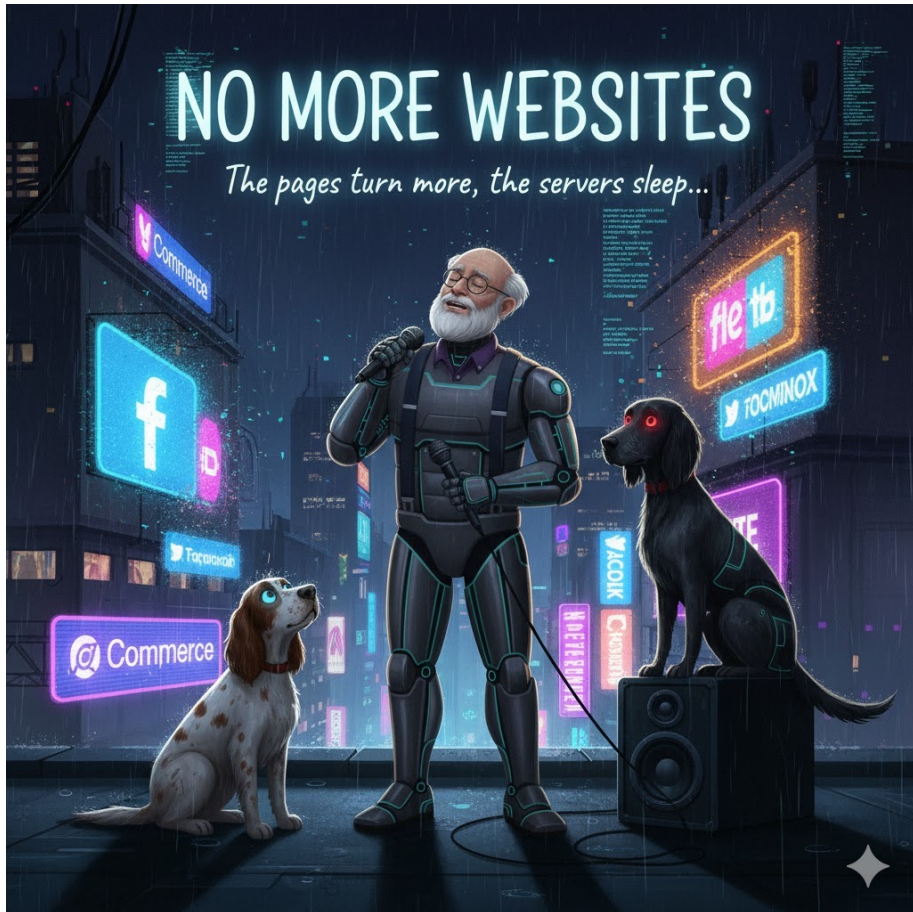
Success is no longer defined by capturing clicks, but by the ability to influence algorithms

- You say: "Book a table for two at the best Mediterranean Bistro place nearby for 19:00."
- Your AI Browser checks ratings, checks your calendar, talks to the restaurant's Booking Agent, and confirms the Gouje & Daniel reservation for 19:00
- **Zero clicks. Zero websites visited.**



Agentic Websites:

Based on Leonard Cohen song , we have **“NO MORE WEBSITES”**



AI-powered search summaries (like Google's AI Overviews) provide answers directly, *eliminating the need for users to click on websites.*

- New Agentic Websites will be based on a **Schema Markup** (specifically JSON-LD).
 - To do this all **data needs to be "tagged"**;
 - AI needs to know exactly what the content is; without guessing.
- The new **AI Browsers will plug first** into platforms that are:
 - accessible via a live feed, not just a static page. (**API** or a clean **Data Feed**)
 - Booking software (Or other tools) should be "AI-partnered."



Navigating the New Consumer Journey

From SEO to GEO: goal of optimization changed

- We used to **optimize for a Human** scrolling a **page** (using catchy headlines and long stories).
- Now, you must **optimize for a Machine** scanning a **database**.

This new field is called **GEO**
(Generative Engine Optimization).

Feature	Old Web (SEO)	Agentic Web (GEO)
Writing Style	Storytelling, longer is better.	Direct, factual, succinct.
Key Metric	Click-Through Rate (CTR).	Citation Rate (Being the answer).
Format	HTML Pages.	Structured Data (JSON-LD).
Goal	Keep user on your site.	Give data to the Agent.



What Are AI Agents?

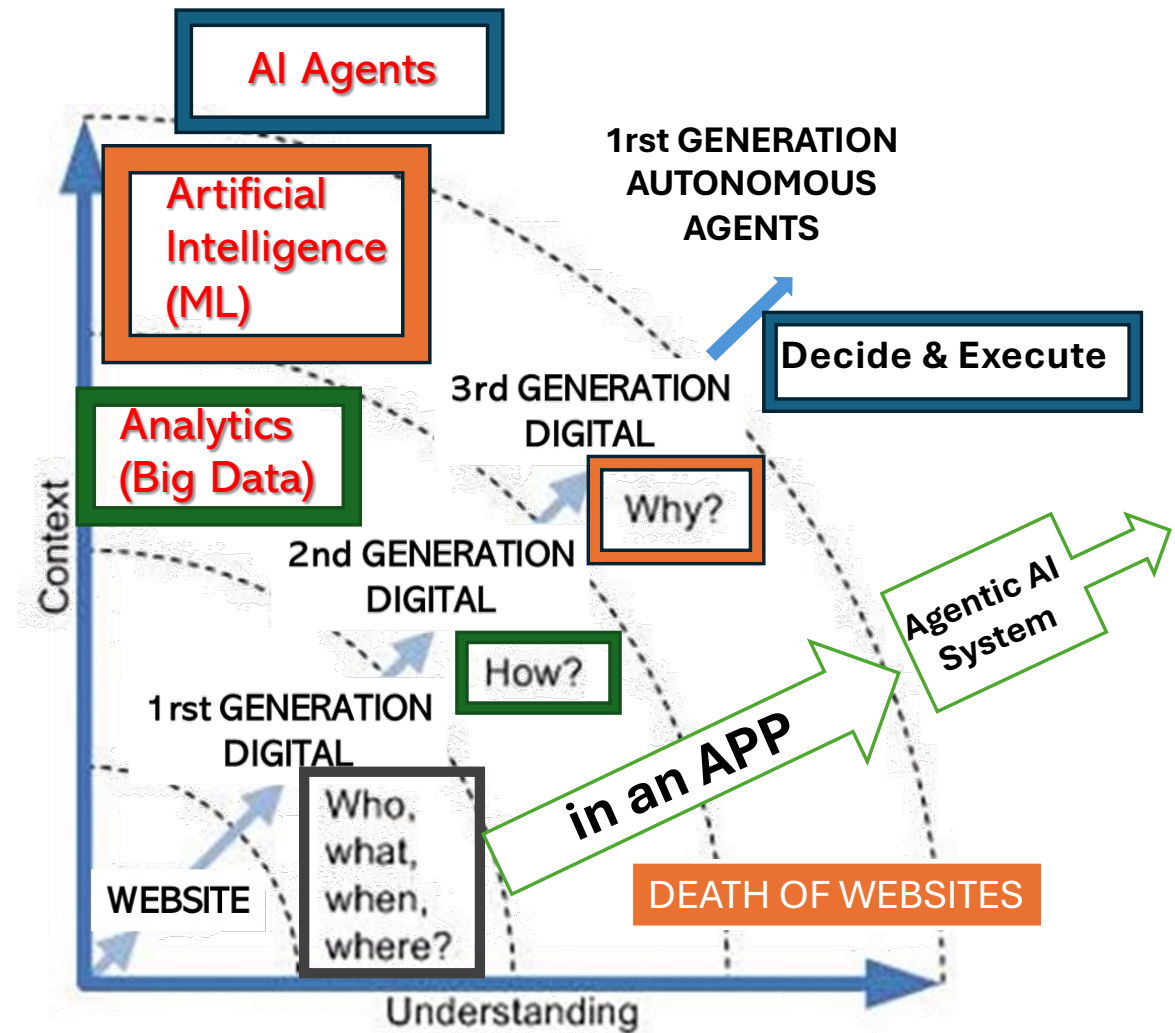
An AI agent is an **atomic software entity** that is programmed by LLM prompts that collects & analyzes data, communicates with other agents, makes decisions, and maybe executes actions to **achieve specific goals**.

Two types:

1. **Task-specific agents** focus on narrow domains like checking flight websites or calendar maintenance
2. **General-purpose agents** adapt across diverse tasks, often learning and collaborating to solve complex problems.



Evolution toward “hyper-personalized concierge” AI Agents



Concierge AI agents SERVICES

Concierge AI agents are designed to act like ultra-capable digital assistants that **proactively manage tasks, make decisions, and coordinate services across multiple domains.**

Examples of what they can do for us:

- **Personalize experiences** by remembering preferences and anticipating future needs
- **Book travel**, hotels, and transportation based on preferences and real-time availability
- **Reschedule meetings**, notify participants, and update calendars automatically
- **Order services** like rideshare, food delivery, or repairs without manual input
- **Handle disruptions** by rebooking flights or arranging alternatives proactively

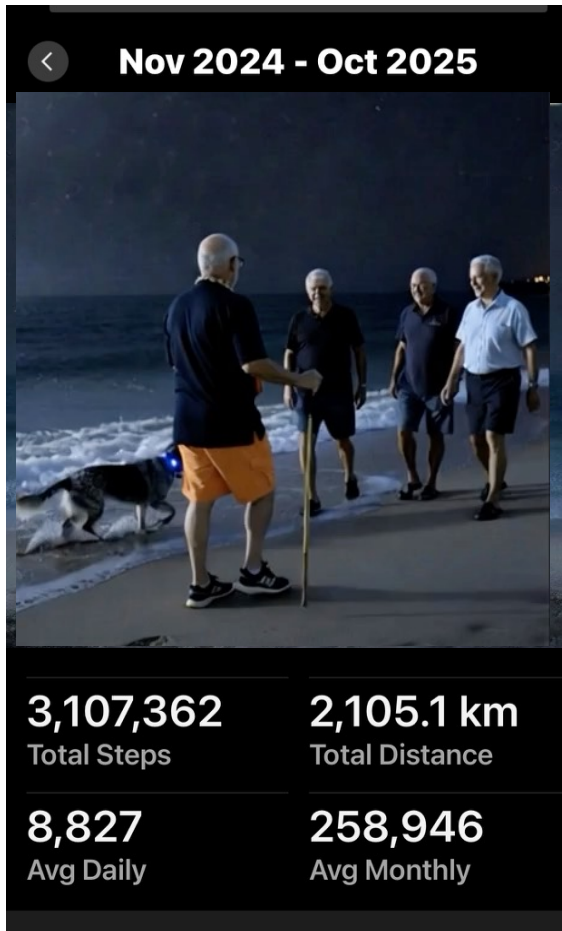


Two parts needed so that the “Concierge-based Super-Hyper-personalized Service” *will be a success*:

1. Has to be **embedded** in the customer/ employee journey and appear at just the right **“Magic Moment”**
2. The **app** has to deliver a **“super-hyper-personalized service”** which is **equivalent to what a concierge** would do



Example of Concierge Super-Hyper-Personalized Services

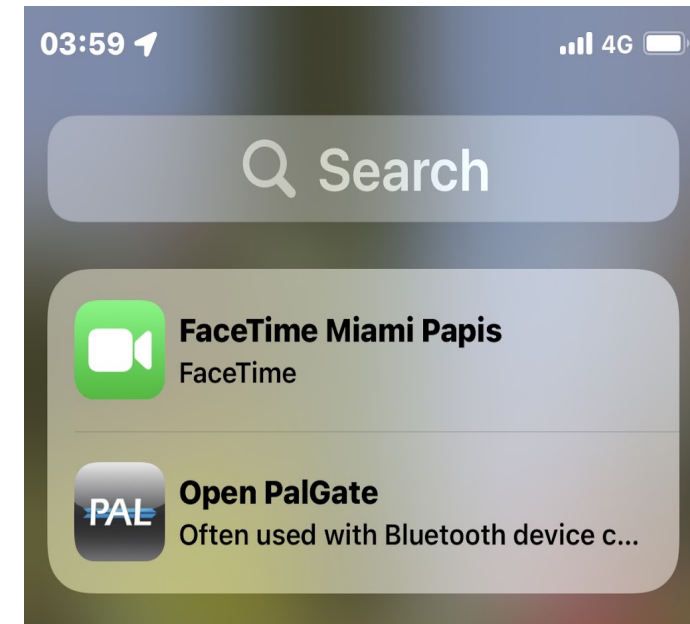


I walk nearly everyday (around 8-10 km) at the beach. I leave home around 4:00 am
But:

1. In order to leave I must **open the moshav gate first**
2. On my way **I speak (FaceTime) with my mother** (Miami, Florida)

Every morning when I close the door and set the alarm triggering in SIRI a specific micro (magic) moment :

Chrome + SIRI agents in my iPhone give me a “service”: they set the apps that I need in the order that I need





The All-Access AI Agents (Intelligent Browsers)

For this AI Agent to do its thing *it needs near-total access to your digital life.*

- It needs “root” access to your entire device:
 - browser history,
 - credit-card details
 - private messages
 - location data
 - Etc.

This AI Agent isn't just a tool; it's a digital steward, *capable of acting on your behalf across domains.*

- But it also raises profound questions:
 - Data secure (cyber security)?
 - Who governs it?
 - Who audits its decisions?
 - How do we ensure it serves *you*, not the system?





Agentic AI Systems

What are they?

What do they do?



Agentic AI Systems are here. Maybe not right now but...

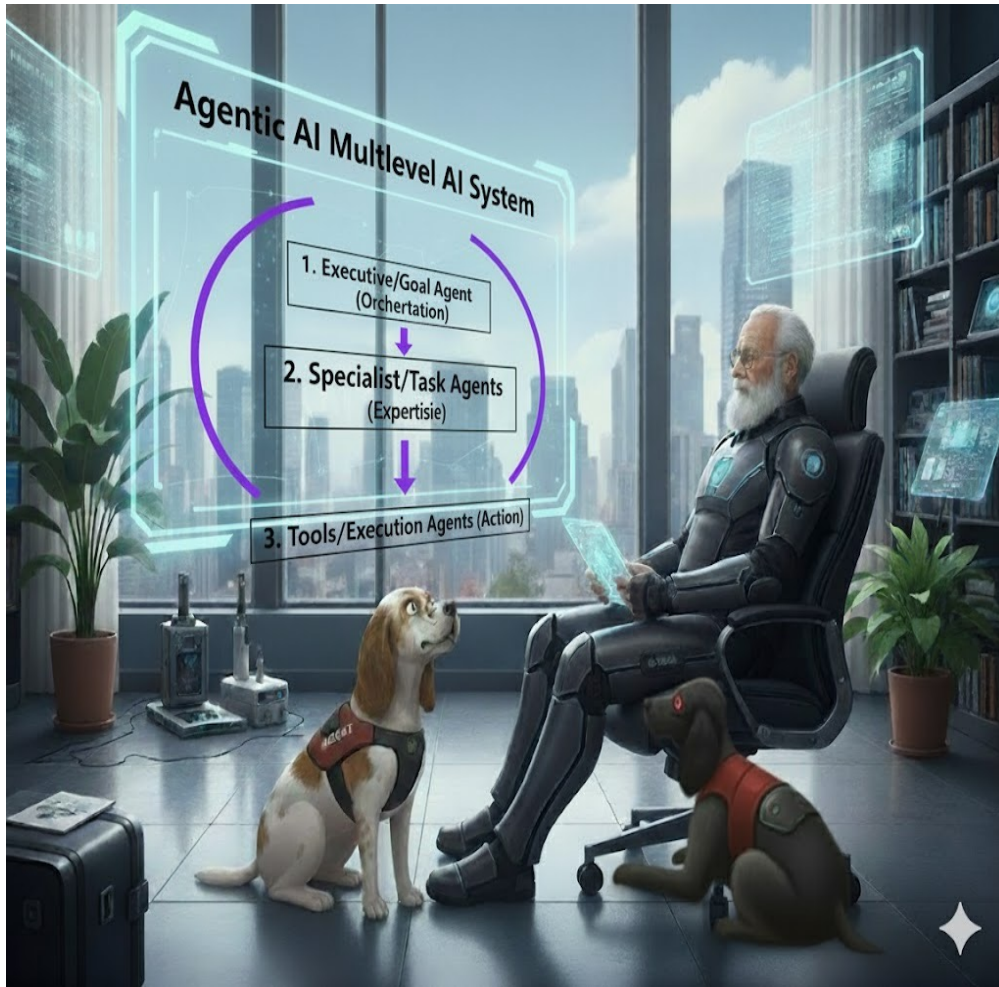


While talking to vendors
(vendor briefings)
every *VENDOR* told us they have

Agentic AI solutions.

We've found
"no industry consensus on what truly
defines "Agentic AI; but getting there"





Agentic AI systems

collective of specialized AI agents that work together to execute complex processes and achieve a predefined objective (goal).

The system is typically organized into a three-level hierarchy:

- **executive layer (goal agents)** for orchestration,
- **specialist layer (task agents)** for domain expertise
- **execution layer (tool agents)** for carrying out actions.



Core Components of Agents in an Agentic AI system



Perception

- Senses its digital environment.
- Reads text, APIs, user input, and other forms of data to understand the current state.

Planning

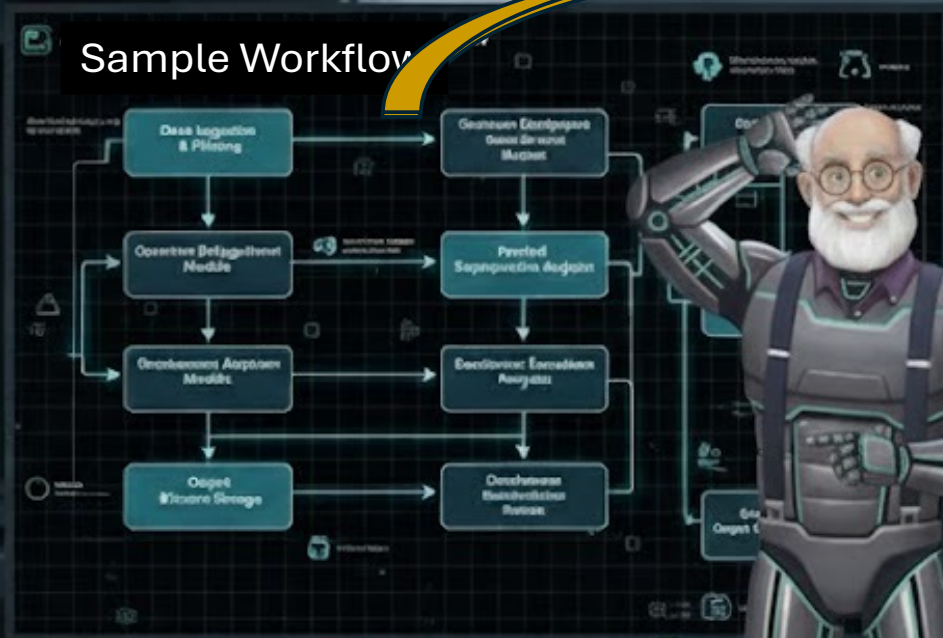
- Deconstructs a complex, high-level goal into a series of smaller, actionable, and logical steps.

Action

- Executes the steps in its plan by using tools, such as running code, performing a web search, or calling an API.



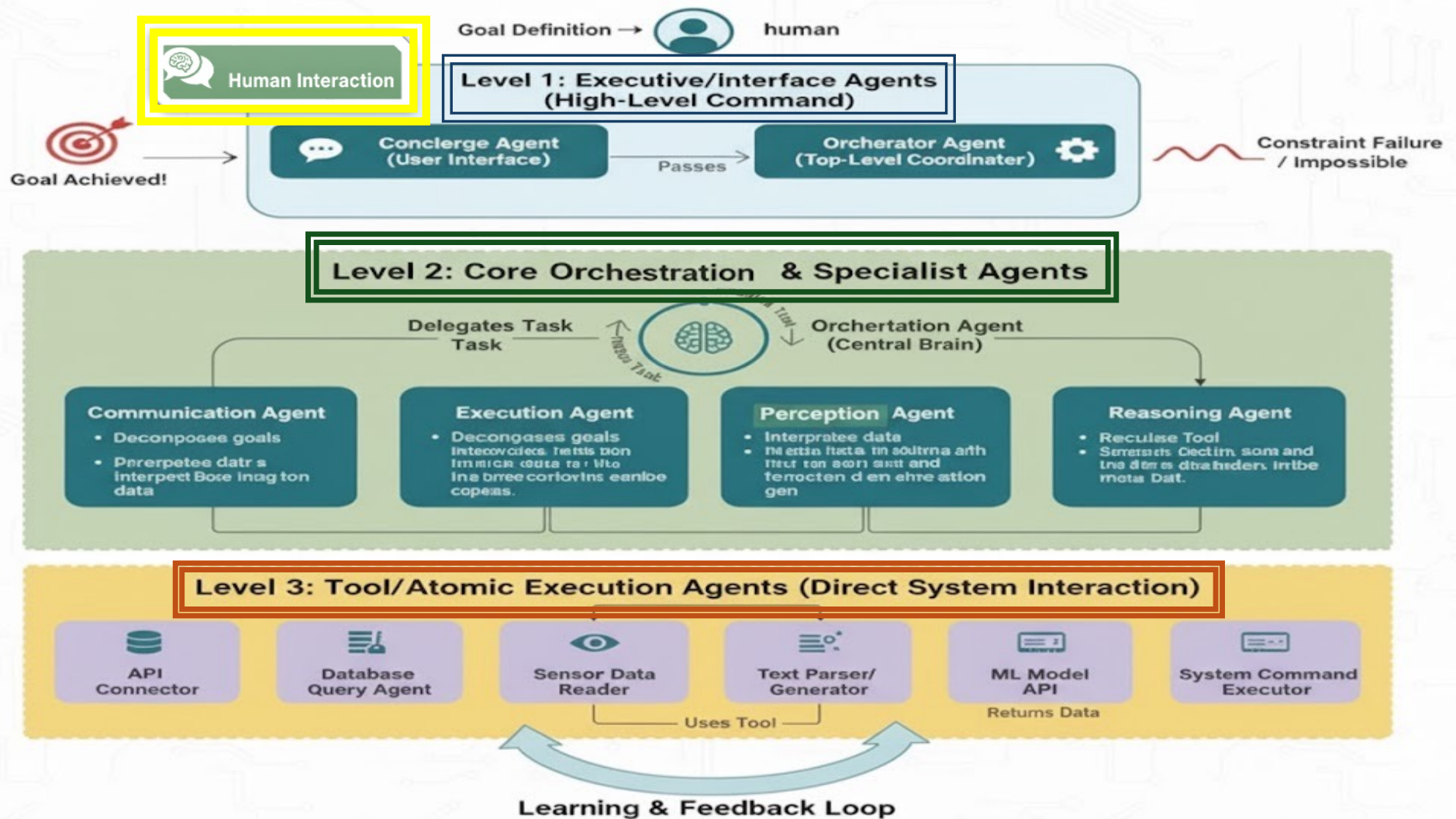
Sample Workflow



Agentic AI System Architecture (3 Level Breakdown)



General Agentic AI System Architecture (3 Level Breakdown)



2026 Agentic AI Strategy

- ✓ Define AI Philosophy
- ✓ Establish Center of Excellence
- ✓ Upskill Talent
- Pilot with Redesign



The TRANSITION TO AGENTIC AI is more than a technological upgrade; it represents a NEW OPERATIONAL PARADIGM for the enterprise.



Achieving this future **requires more than just deploying technology**. It demands a deliberate and strategic **choice of a foundational agentic philosophy**

The **adoption of an agentic philosophy** is the **first, critical step** toward redesigning the enterprise

true transformation lies in the next evolutionary step:

- **the rise of collaborative, multi-agent systems.**

As **vendors like AWS and Google provide the frameworks and application vendors open their platforms to interoperability, we will see the emergence of Agentic AI** systems that can orchestrate business processes from end to end.

The future of the enterprise is not a single-agent environment but a complex, multi-agent ecosystem.



No single vendor will solve every business problem, organizations will deploy agents from several vendors (from their CRM provider, their ERP provider, their productivity suite provider, and custom agents built on a cloud platform).

Organizations ***must act now*** and establish an AI Center of Excellence (CoE) tasked with:

1. Developing a framework for the selection of all AI agents, regardless of their vendor of origin.
2. Managing a central "agent catalog" to promote the reuse of agentic capabilities across business units.
3. Establishing standards for the entire portfolio (including security)
4. Serving as the central hub for knowledge navigating the complexities of a multi-vendor, multi-agent future.



Every vendor with his own Agentic AI philosophy and yours??



Vendor	Core Strategic Domain	"Builder" Persona Focus
Salesforce	Front Office (CRM): Sales, Service, Marketing. Mastering the customer lifecycle.	Admin & Business User: <u>Low-code Copilot Builder. Extensible via Apex/Flow for developers.</u>
Microsoft	Universal Productivity: Pervasive assistance across the entire digital work experience (M365, Windows).	Dual-Pronged: <u>Low-code Copilot Studio for business users; Pro-code frameworks (e.g., AutoGen) for developers.</u>
ServiceNow	Structured Workflows: ITSM, HRSD, CSM. Focus on automating multi-step enterprise processes.	Platform Owner & Analyst: Configuration-focused, "plug-and-play" pre-built agents. Customization via Flow Designer.
SAP	Back Office (ERP): Finance, Supply Chain, Procurement, HR. Grounded in core business transactions.	Dual-Pronged: Joule for Developers (pro-code ABAP/Java); Joule Studio (low-code) for business users.
Oracle	Enterprise Applications Suite: ERP, HCM, SCM, CX. AI layer over Fusion Cloud Applications.	Admin & Business User: No-code/low-code AI Agent Studio focused on customizing pre-built templates.
Google Cloud	Horizontal Developer Platform: <u>Providing tools to build agentic solutions for any domain.</u>	Developer-First: Pro-code Agent Development Kit (ADK) and support for open-source frameworks (LangChain).
AWS	Horizontal Developer Platform: <u>Providing foundational building blocks for custom agentic systems.</u>	Developer-First: Pro-code SDKs (Strands Agents) and specialized IDEs (Kiro). Granular developer control.



Every vendor with his own Agentic AI philosophy and yours??



Vendor

Core Strategic Domain

"Builder" Persona Focus

PHILOSOPHIES CHANGE

Just days ago (November 20, 2025):

Satya Nadella sent a memo to Microsoft executives telling them they must **"rapidly rethink the new economics of AI across the company."**

He warned that the company needs a "reboot" similar to its pivot to the cloud and internet .

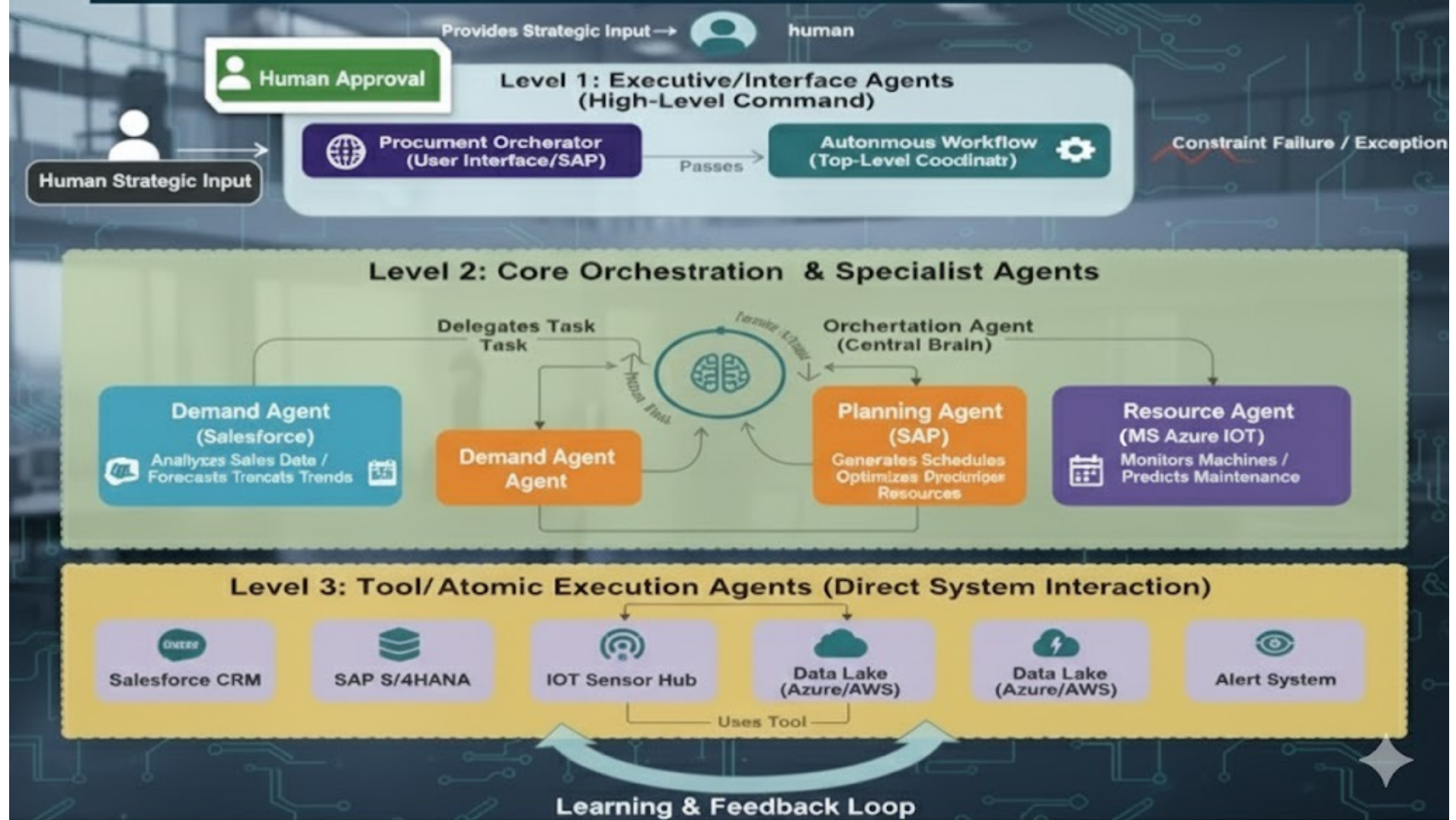
He emphasized that Microsoft must shift from just "AI tools" to building a "new AI factory" and a family of autonomous agents that work alongside humans.



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PRODUCTION PLANNING AGENTIC AI MULTIVENDOR SYSTEM



**Before the examples, let's
talk about four new
concepts!**



MCP/A2A



VIBE Coding



SLMs

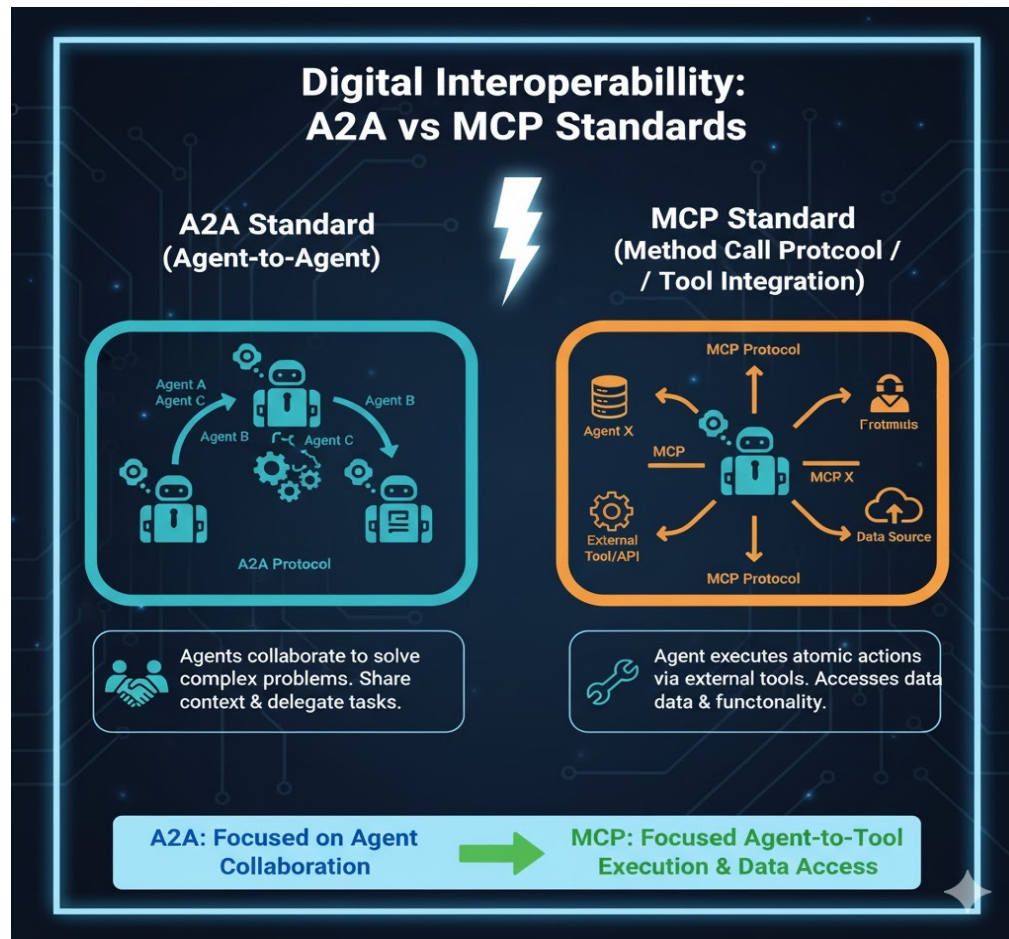


AI Agent Types



A2A & MCP for Multi-agent systems

synchronization, coordination & communications



- Agents execute atomic actions by communicating through an interface with external tools and data sources via the MCP protocol
- Multi level agents collaborate, coordinate and communicate via the A2A protocol



Key Differences: MCP vs A2A

Feature	MCP (Model Context Protocol)	A2A (Agent-to-Agent Protocol)
Creator	Anthropic	Google
Primary Focus	Tool standardization for AI models	Communication between autonomous agents
Architecture	Client-server model for tool access	Peer-to-peer model for agent collaboration
Use Case	Connecting LLMs to external tools and data	Enabling agents to discover, negotiate, and collaborate
Strengths	Reusability, plug-and-play tools, ecosystem support	Rich agent interaction, async ops, capability sharing
Current Adoption	Widely adopted (e.g., OpenAI support)	Still emerging, fewer implementations

MCP is gaining traction fast.

- Its **USB-like standardization for tools makes it ideal for building robust, modular AI ecosystems.**
- It will become a backbone for tool-enabled agents and workflows.

A2A tackles a deeper layer:

- **Layer where agents *talk to each other*.**
- While it's less mature, it's crucial for building autonomous multi-agent systems
- Systems where AI agents negotiate tasks, share goals, or form temporary teams.



VIBE CODING or CHOP (Chat Oriented Programming)



From "Syntax" to "Semantics" (Intent over Code)

- Instead of needing to know the technical "how" **users simply describe the "what"** and the desired "feel" of the outcome. **The AI handles the implementation.**

The User as "Curator" (The Vibe Check)

- The human role shifts **from creator to editor**. The machine generates the work, and the human provides the "vibe" check

Empathic & Ambient Context

- Computers stop being passive tools and start **understanding context, tone, and mood.**



Small language models (SLMs)

secret weapon for smart, agile businesses and the trend toward **industry-specific solutions**

🔒 Privacy-Preserving Applications

SLMs can run locally, ideal for government, healthcare, finance, and education

No need to send data to the cloud, reducing risk and boosting compliance

💰 Cost-Effective & Energy-Efficient

Require 30–40% less computational power than large models

🎯 Specialized Tasks

Can be fine-tuned for niche domains like legal, medical, or customer service



AI agent types



1. Basic LLM (The "Conversationalist")

Function: Uses **pre-trained knowledge** to **answer** questions or generate text.

2. RAG Agent (The "Researcher")

Function: Retrieval-Augmented Generation. **Connects the LLM to a specific database**

3. Single-Task Tool User (The "Doer")

Function: An agent **given access to specific "tools"** (APIs, Calculators, Web Search). It can **determine when it needs** to use a tool to complete a request..

4. Reasoning & Planning Agent (The "Orchestrator")

Function: Can **take a vague, high-level goal and break it down into a step-by-step plan** (Chain of Thought). It executes the steps sequentially, checking its own work.

5. Multi-Agent System (The "Autonomous Organization")

Function: **A network of specialized agents that collaborate.** They communicate with each other, hand off tasks, and debate solutions to achieve a complex outcome without human intervention.



Three examples of different types of Agentic AI Systems

AI in Shopping Experiences



AI in Travel



Enterprise Agentic AI Example



Autonomous AI agents in the “shopping experience”

The AI Shopping Agent

- Acts as a shopper, with a given budget and getting to **know the preferences**, reading thousands of reviews on a product to find the best fit and comparing prices.

The AI Sales Assistant Agent (deals with dual audiences)

- **For Humans:** Emotional appeal, brand storytelling, lifestyle imagery.
- **For AI Shopping Agent:** Data-rich product feeds, structured metadata, transparent pricing, etc



AI Agents: The Collaboration

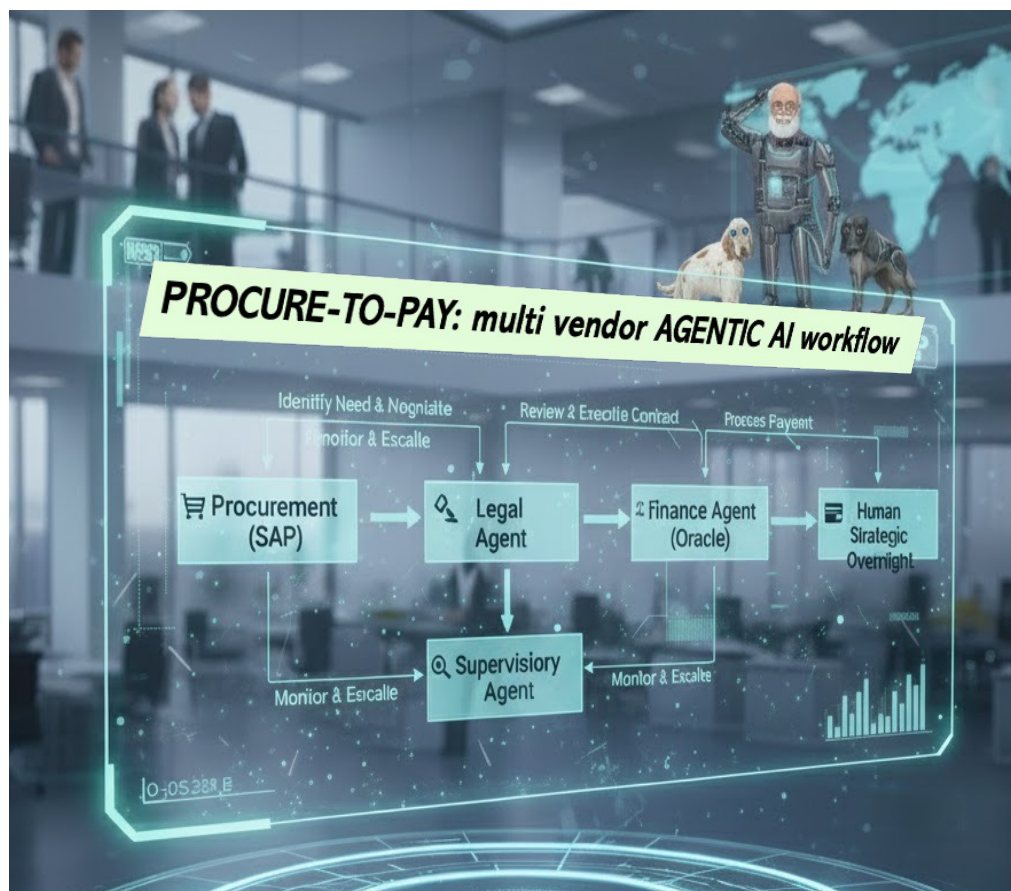
A Symbiotic Loop for Modern E-Commerce

The AI Shopping Agent

AI Sales Assistant Agent



Example: Agentic AI workflow based on vendor's AI agents

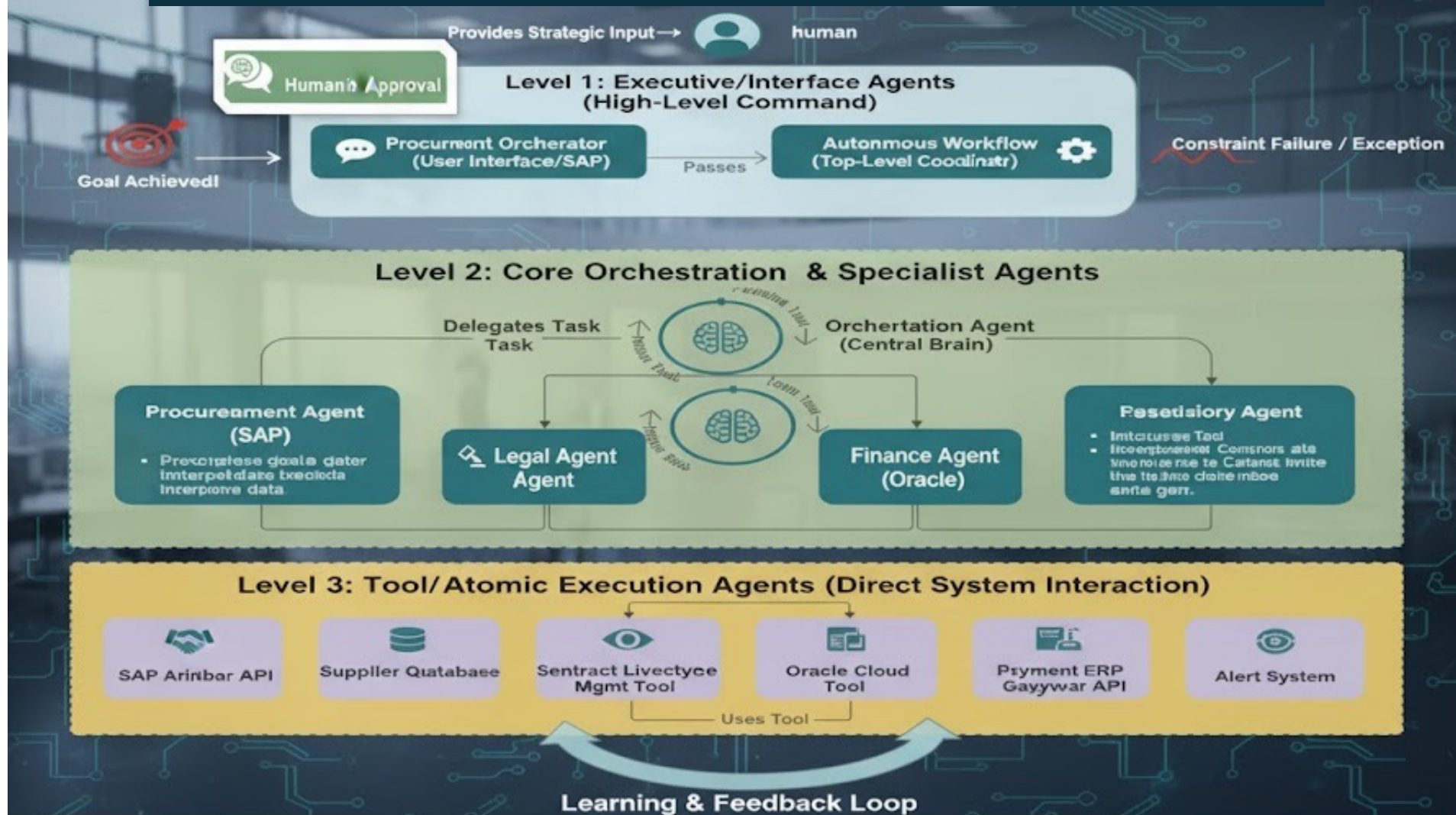


"PROCURE-TO-PAY" process managed by a team of collaborating agents:

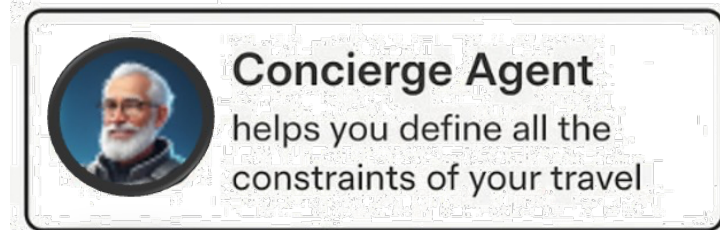
1. Concierge agent that defines the goal
2. Orchestrator agent that monitors the entire workflow,
3. Framework supplied by AWS or GCP
4. Procurement agent from SAP that identifies a need and negotiates with suppliers,
5. Legal agent that reviews and executes the contract,
6. Finance agent from Oracle that processes the payment,
7. More.....



PROCURE-TO-PAY AGENTIC AI MULTIVENDOR SYSTEM



Example: AgenticAI workflow based on custom AI agents



I want a beach vacation:

- **December** somewhere warm,
- **Not too crowded,**
- **Boutique** hotels.
- Budget is **under \$2,000.**
- I'll be flying **from Tel Aviv**
- Prefer seats in **rows 30 to 32** on the plane





Autonomous Travel Planning Agentic AI System

All constraints are transmitted by the user to the

CONCIERGE AGENT , the agent defines the

ultimate goal

“ trip planned and all parts confirmed and

ticketed”

and passes this to **ORCHESTRATION AGENT**



The orchestrator (super agent)

This agent acts as an **autonomous project manager**. It takes a vague, high-level goal (e.g., "Plan my December vacation") and **deconstructs it into a logical, multi-step plan**.

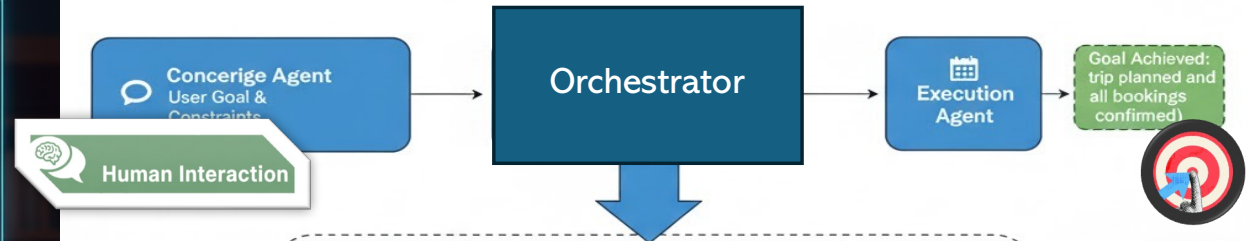
It then **executes that plan, calling on other tools** (like web search, flight APIs, and calendar agents) in the **correct order, checking its own work along the way until the goal is achieved**.





Autonomous Travel Planning Agentic AI System

Level 1: Executive/Goal Agents (Orchertration)

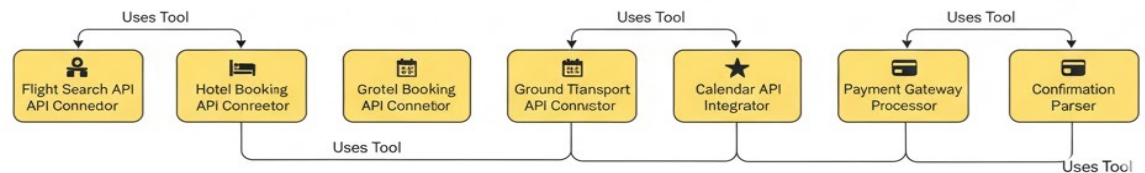


Level 2: Specialist/Task Agents (Expertise)



The Agent Loop (Workers)

Level 3: Tool/Execution Agents (Action)



Name of Level	Agents / Components	Primary Role
Executive/Goal Agents (Orchestration)	Concierge Agent 	Gathers the User Goal & Constraints and initiates the process.
	Goal Execution	Acts as the overall manager, translating the goal for the Execution Agent.
	Execution Agent	Final step in the Executive layer that moves the system to the 'Goal Achieved' state.
	Orchestration Agent (Central Brain)	The core decision-maker. Checks constraints, delegates tasks to Specialist Agents, and handles iteration or constraint failure.
Specialist/Task Agents (Expertise)	Flight Agent	Specialized in finding flight options based on constraints.
	Hotel Agent	Specialized in finding accommodation options.
	Logistics Agent	Specialized in finding ground transport/local logistics.
	Payments Agent	Handles final booking and budget/payment processing.
	Calendar Agent	Confirms dates/time off/availability for the trip.
Tool/Execution Agents (Action)	Flight Search API Connector	Uses a tool to interact with external flight APIs.
	Hotel Booking API Connector	Uses a tool to interact with external hotel APIs.
	Ground Transport API Connector	Uses a tool to interact with external logistics/transport APIs.
	Payment Gateway Processor	Uses a tool to execute the financial transaction.
	Calendar API Integrator	Uses a tool to check/block dates in a user's calendar.
	Confirmation Parser	Uses a tool to process and parse confirmation documents.







PREDICTIONS FOR AGENTIC AI FUTURE USES (2026-2030)

Prediction/ trend	timeline	impact
autonomous problem resolution	up to 80% of customer services issues by 2029	faster customer interactions: reduced human load; higher first contact resolution
decision making automation	25% of day-to-day work decisions by 2029	increased productivity; routine choices handled autonomously with human intervention
enterprise integration, new operational paradigm	40% of enterprise applications by 2029	streamlined workflows: unified AI agents across CRM,ERP, analytics, productivity, etc
building new workflows based on custom AI agents into Agentic AI systems	first 10 AgenticAI workflows by 2029	new AI agents blocks and a marketplace (in house and industry wide)

@STKI 2025



**IN LIFE, IT'S
IMPORTANT TO
KNOW WHEN TO
STOP ARGUING
WITH PEOPLE -
AND SIMPLY LET
THEM BE WRONG.**

